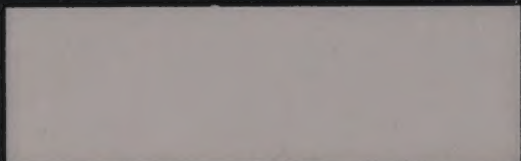


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IMMEDIATE RESPONSE ACTION PLAN AND COMPLETION REPORT

UST Release
343 Summer Street
Somerville, Massachusetts

MassDEP RTN 3-33735

March 16, 2017

Prepared for:

351 Summer LLC
c/o The Maggiore Companies
13 Wheeling Avenue
Woburn, Massachusetts 01801

Prepared by:

EnviroTrac Ltd.
2 Merchant Street, Suite 2
Sharon, Massachusetts 02067

***A Full Service Environmental Consulting
and Contracting Firm***



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1.0 INTRODUCTION

EnviroTrac Ltd. (EnviroTrac) to prepare this Immediate Response Action Plan and Completion Report (IRAP/IRAC) on behalf of 351 Summer LLC for a UST oil release at 343 Summer Street in Somerville, Massachusetts (Site). 351 Summer LLC acquired the property from The Dakota Group on February 6, 2017.

This IRAP/IRAC is being submitted to the Massachusetts Department of Environmental Protection (MassDEP) to address Release Tracking Number (RTN) 3-33735 and was prepared in accordance with the requirements of the Massachusetts Contingency Plan (MCP) as set forth at 310 CMR 40.0424 and 40.0427. Response Actions presented in this report occurred from August 8, 2016 to September 23, 2016.

2.0 RESPONSIBLE PARTY

The person listed below is the potentially responsible party conducting the Immediate Response Actions described herein:

Responsible Party:	351 Summer LLC
Contact Name:	Mr. Matthew Maggiore, Manager
Address:	c/o The Maggiore Companies 13 Wheeling Avenue Woburn, Massachusetts 01801
Telephone Number:	(781) 935-6100
Relationship to the Disposal Site:	Owner

3.0 AREA AND DISPOSAL SITE DESCRIPTION

3.1 Release Description

For the purpose of this report, the preliminary Disposal Site is defined as the area located within proximity of the Release on 343 Summer Street in Somerville, Massachusetts. The preliminary Disposal Site is located at geographical location coordinates 42.39369° North and 71.11910° West. A Locus Map is provided as **Figure 1**.

3.2 Site Conditions

The Site consists of a vacant parcel of land located in a flat, low-lying area surrounded by residences and commercial properties. The Massachusetts Bay Transportation Authority (MBTA) Red Line runs directly below the Site within a bedrock tunnel approximately 80 feet bgs. A MBTA Red Line Vent Structure is located approximately 50 feet south of the Site.

A Site Plan depicting the approximate location of the release and other pertinent features is provided as **Figure 2**.

The Site is bordered by the following:

North:	Residential properties
South:	Summer Street, beyond which are residential properties.
East:	Residential and commercial properties.
West:	Veterans of Foreign Wars building/parking lot and commercial properties.

The Disposal Site is defined as the area where oil and/or hazardous materials (OHM) have come to be located as a result of the UST oil release. Based on analytical data collected to date, the approximate horizontal extent of the preliminary Disposal Site is depicted on the Site Plan (**Figure 2**). The Disposal Site extends vertically approximately from the ground surface to 7-8 feet bgs.

3.3 Surrounding Receptors

The Disposal Site is located in an area zoned Residence A (RA), and is surrounded by properties zoned Residence B (RB), Central Business District (CBD) and Neighborhood Business (NB).

Information regarding MCP Priority Resources as depicted in **Figure 4** and as obtained from the Massachusetts Office of Geographic Information shows no sensitive receptors located within 500 feet of the Disposal Site.

Protected Open Spaces are located to the north, northeast, northwest, and southwest of the Disposal Site, the nearest of which is approximately 800 feet north.

Two surface railroads are located within one-half mile of the Disposal Site. The MBTA Red Line is located in a bedrock tunnel approximately 80 feet beneath the Site.

The nearest surface water body is Fresh Pond located approximately 1.3 miles southwest of the Disposal Site.

No institutions are located within one-half mile of the Disposal Site.

4.0 REQUIREMENT FOR IMMEDIATE RESPONSE ACTION

In accordance with the requirements of the MCP, as set for at 310 CMR 40.0311 (3), a 2-hour reporting requirement was triggered when approximately 30 gallons of oil was release from an underground storage tank (UST) during removal.

5.0 EVALUATION OF IMMINENT HAZARD, SUBSTANTIAL RELEASE MIGRATION AND CRITICAL EXPOSURE PATHWAY CONDITIONS

5.1 Imminent Hazard (IH)

Based on the site conditions documented herein, no conditions meeting the 2-hour release notification obligations of the MCP, as set forth at 310 CMR 40.0321, are present. In consideration of the Response Action Performance Standard (RAPS), as set forth at 310 CMR 40.0191 and the Imminent Hazard (IH) criteria set forth at 310 CMR 40.0950, site conditions meeting the criteria of an Imminent Hazard are not likely and a quantitative IH evaluation is not warranted.

5.2 Substantial Release Migration (SRM)

Based on the site conditions documented herein, no conditions meeting the conditions specified at 310 CMR 40.0303(4) are present at the Disposal Site.

5.3 Critical Exposure Pathway (CEP)

Based on the site conditions documented herein, no volatile compounds are present at the Disposal Site which might result in vapor intrusion to the living space of an occupied residential dwelling. No drinking water supply wells are located in the vicinity of the Disposal Site. Therefore, no CEP condition is present.

6.0 REQUIRED PERMITS

No permits were required to complete the IRA activities described herein. At the time of discovery of the two (2) 60-gallon USTs, the Somerville Fire Department was notified and no permit for removal was required.

7.0 RELEASE HISTORY

Upon review of information available through MassDEP's Waste Site/Reportable Releases Look Up, EnviroTrac identified no RTNs issued for releases at 343 Summer Street in Somerville, MA other than RTN 3-33735. The Release associated with RTN 3-33735 occurred on August 8, 2016 during test pitting activities on the property when a backhoe damaged an encountered UST, releasing approximately 20-30 gallons of oil from the UST to the surrounding soil.

8.0 IMMEDIATE RESPONSE ACTION

On August 8, 2016, EnviroTrac monitored the completion of test pits excavated by Koster and Sons Construction, Inc. The test pits were completed to investigate the potential existence of an underground storage tank (UST) on the 343 Summer Street parcel. A historical (1934-1950) Sanborn Insurance Map showed the existence of a "gas tank" on the property and there was no available documentation that the UST had been removed from the property.

A series of trenches, approximately 5 feet wide and 7-8 feet deep were excavated using a backhoe. The locations of the test pit trenches are shown on **Figure 2**.

During the test pit activities, a UST was encountered and damaged by the backhoe. The top of the UST was approximately 2.5 feet bgs. The UST was 30 inches in diameter and 24 inches in length with a volume capacity of approximately 60 gallons. As the result of the UST containing oily liquid, approximately 20-30 gallons of liquid were released to the adjacent soil when the UST was damaged.

In response to the release, both the Massachusetts Department of Environmental Protection (MassDEP) and the Somerville Fire Department were notified. MassDEP assigned Release Tracking Number (RTN) 3-33735 to the Site. In accordance with a MassDEP-approved Immediate Response Action (IRA), approximately 5 tons of oil-impacted soil were excavated by Strategic Environmental Services, LLC (SES) on August 12, 2016, from the vicinity of the damaged UST.

The impacted soil was stockpiled on-site, characterized for disposal and transported off-site for disposal.

On August 12, 2016, during the excavation of impacted soil associated with the UST encountered on August 8, 2016, two small diameter buried pipes were observed exiting the excavation. Further excavation in the area of the piping identified a second small UST (Tank #2) approximately 6 feet west of the first UST (Tank #1). Tank #2 was confirmed to be approximately the same size as Tank #1 with no evidence of releases or leaks from the UST observed. The contents of both tanks were removed and placed in two (2) 55-gallon drums for off-site disposal. After cleaning, the tanks were removed from the excavation and transported to the James G. Grant Co. tank yard for disposal. A copy of the waste disposal documentation for the tank contents and tanks is included in **Appendix B**.

On September 23, 2016, the oil-impacted soil excavated on August 12, 2016 by SES, was placed into a roll off container and transported under a Bill of Lading to Aggregate Recycling Corporation in Eliot, Maine for disposal. Based on the provided documentation, approximately 5 tons of soil were disposed.

9.0 INVESTIGATION AND MONITORING DATA

On August 12, 2016, eight (8) soil samples, representative of the extent of the excavation in the vicinity of the two USTs, were obtained by EnviroTrac. The soil samples, identified as S-1 through S-8, as shown on **Figure 3**, were placed into clean, appropriately preserved glassware and transported under a chain of custody to SGS Accutest Laboratories (SGS) of Marlborough, Massachusetts. Each soil sample was analyzed for extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH). A composite sample, representative of the stockpiled oil-impacted soil, was also obtained and analyzed for soil disposal parameters. A sample of the contents of Tank #1 was also submitted to SGS for forensic fingerprint analysis. The laboratory results are summarized in **Table 1**. Copies of the laboratory reports are included in **Appendix A**.

On August 17, 2016, groundwater samples were collected from 10 monitoring wells installed on the Disposal Site property and the westerly-abutting property. Select samples were analyzed for volatile organic compounds (VOC) using EPA Method 8260, extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH) using the MassDEP Methods, and the MCP 14 metals. The groundwater samples were collected using a modified low-flow method into laboratory provided, pre-cleaned and pre-preserved glassware, stored on ice and transported to SGS laboratory in Marlborough, Massachusetts for analyses. The monitoring well locations are depicted on **Figure 2**. The laboratory results are summarized in **Table 2**. Copies of the laboratory reports are included in **Appendix A**.

10.0 FINDINGS AND CONCLUSIONS

Based on the information contained herein, the findings of the IRA are as follows:

- A sudden release of approximately 30 gallons of oil occurred when a UST was damaged during test pit excavation;
- The sudden release of oil trigger a 2-hour reporting obligation to MassDEP. Verbal notification was made to MassDEP on August 8, 2016 and RTN 3-33735 was assigned;

- The damaged 60-gallon UST, along with a second similar UST, were emptied, cleaned and removed;
- Two (2) 60-gallon steel USTs were transported and disposed at James G. Grant Co. in Readville, MA;
- Two (2) drums of oily solids (approximately 700 pounds) were transported by Oil Recovery Corporation to VEXOR Technology, Inc. of Medina, OH for disposal;
- Approximately 5 tons of oily soil was transported and disposed at Aggregate Recycling Corp. in Eliot, Maine;
- No IH, SRM or CEP conditions were identified;
- A total of eight (8) post-excavation soil samples were collected and analyzed for EPH and VPH. Five (5) EPH target analytes were present at concentrations exceeding their MCP S-1 reportable concentrations for soil; and,
- A total of five (5) groundwater monitoring wells were installed on the Disposal Site property, and an additional five (5) wells installed on the westerly abutting property for transaction due diligence purposes. Select groundwater samples were analyzed for VOC, EPH, VPH and 14 MCP Metals. No method analyte concentrations exceeded MCP reportable concentrations for groundwater category GW-2.

Based on the findings summarized above, EnviroTrac concludes the following:

- The sudden release of oil which gave rise to the need to conduct an IRA has been assessed and remediated to the extent necessary to stabilize site conditions;
- All remediation waste generated during the IRA has been removed from the site; and,
- Further MCP Preliminary or Comprehensive Response Actions are required to remediate the presence of EPH target analytes present in soil at concentrations exceeding the MCP reportable concentrations.

11.0 MANAGEMENT OF REMEDIATION WASTE

A total of 4.77 tons of impacted soil was excavated during cleanup activities. SES removed excavated soil from the Site on September 23, 2016 for proper off-site disposal at the Aggregate Recycling Corporation facility in Eliot, Maine. Two (2) drums containing 700 pounds of oily solids was transported to VEXOR Technology, Inc. in Medina, OH for disposal. A copy of the waste disposal documentation is provided in **Appendix B**.

12.0 PUBLIC NOTIFICATION

In accordance with the requirements of the MCP (310 CMR 40.1403(3)(h)), notification will be made to the City of Somerville Chief Municipal Officer and Board of Health that includes a copy of the submitted Release Notification Form (RNF) and a statement of the local officials' right to request additional Public Involvement Activities. Copies of the Public Notification letters are included as **Appendix C**.

FIGURES



SOURCE: OFFICE OF GEOGRAPHIC INFORMATION (MassGIS), COMMONWEALTH OF MASSACHUSETTS, MassIT.
USGS TOPOGRAPHIC MAPS: BOSTON NORTH AND BOSTON SOUTH, MA QUADRANGLES

LOCUS MAP

343 - 351 SUMMER STREET
SOMERVILLE, MASSACHUSETTS

EnviroTrac
Environmental Services

2 Merchant Street, Suite 2 P: (781) 793-0074
Sharon, Massachusetts 02067 F: (781) 793-7877

www.EnviroTrac.com

DRAWN BY

RHB

PROJECT

03.990202.00

DATE

3/7/2017

FIGURE

1

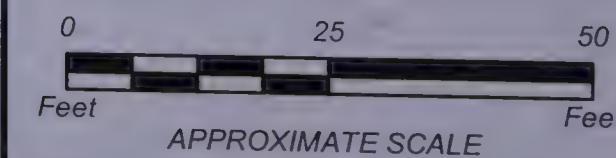


LEGEND

- 343-351 PROPERTY BOUNDARY
- Fence
- MBTA VENT
- UST
- TEST PITS
- SOIL BORING
- MONITORING WELL
- HISTORIC SOIL BORING
- EXISTING MONITORING WELL



Data Source: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT.



REVISED BY: RHB
REVISION DATE: 9/8/2016

FIGURE
2

SITE PLAN

343-351 SUMMER STREET
SOMERVILLE, MASSACHUSETTS



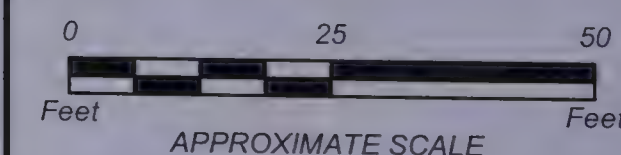


LEGEND

- 343-351 PROPERTY BOUNDARY
- FENCE
- MBTA VENT
- UST
- TEST PITS
- SOIL BORING
- MONITORING WELL
- HISTORIC SOIL BORING
- EXISTING MONITORING WELL
- UST SOIL SAMPLES
- UST EXCAVATION



Data Source: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT.



REVISED BY: RHB
REVISION DATE: 9/8/2016

FIGURE
3

UST EXCAVATION AND
SAMPLE LOCATION DETAIL

343-351 SUMMER STREET
SOMERVILLE, MASSACHUSETTS





LEGEND

- Railroads
- Pipeline
- Pipeline Arbitrary Extension
- Solid Waste Landfills
- EPA Sole Source Aquifer
- NHESP Priority Habitats of Rare Species
- NHESP Certified Vernal Pools
- ACECs
- Protected Open Space

Roads

- Limited Access Highway
- Multi-lane Hwy, not limited access
- Other Numbered Highway
- Major Road, Collector
- Minor Road, Arterial

USGS Hydrography

- Perennial Stream
- Intermittent Stream
- Shoreline
- Ditch/Canal
- Aqueduct
- Dam

DEP Wetlands

- Marsh/Bog
- Wooded Marsh
- Cranberry Bog
- Salt Marsh
- Open Water
- Reservoir (with PWSID)
- Tidal Flats
- Beach/Dune

Public Water Supplies

- Community Groundwater Source
- Surface Water Intake
- Non-Community Groundwater Source
- Emergency Surface Water
- DEP Approved Zone IIs
- Interim Wellhead Protection Areas
- Surface Water Supply Zone A

Non-Potential Drinking Water Source Areas

- High-Yield
- Medium-Yield

Potentially Productive Aquifers

- High-Yield
- Medium-Yield

Data Source: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT.

0 800 1,600
Feet APPROXIMATE SCALE Feet

REVISED BY: RHB REVISION DATE: 3/15/2017	FIGURE 4
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MassGIS PRIORITY RESOURCE MAP
500 foot and 0.5 mile Radii

343 - 351 SUMMER STREET
SOMERVILLE, MASSACHUSETTS

EnviroTrac
Environmental Services

TABLES

TABLE 1

SUMMARY OF UST AREA SOIL ANALYTICAL DATA

Maggiore Somerville
343-351 Summer Street
Somerville, Massachusetts

Sample Date Sample ID Depth (feet) PID (ppmv)		August 12, 2016								MCP Method 1 Soil Standard (mg/kg)	
		S-1 8-9 BDL	S-2 8 BDL	S-3 8.5 BDL	S-4 7-8 BDL	S-5 7 BDL	S-6 5 BDL	S-7 6 BDL	S-8 6 BDL	S-1 GW-2/GW-3	
EXTRACTABLE PETROLEUM HYDROCARBONS (mg/kg)											
C9-C18 Aliphatics		<8.8	<9.5	11.7	<8.9	<9.1	13.4	10.3	<9.4	1,000	
C19-C36 Aliphatics		76.6	<19	95.3	<18	64.9	488	380	226	3,000	
C11-C22 Aromatics		142	<19	655	<18	161	294	171	128	1,000	
Acenaphthene		0.6	<0.47	1.7	<0.44	0.7	<0.46	<0.46	<0.47	1,000	
Acenaphthylene		<0.44	<0.47	2.5	<0.44	<0.45	<0.46	<0.46	<0.47	600/10	
Anthracene		1.7	<0.47	11.9	<0.44	1.9	<0.46	<0.46	<0.47	1,000	
Benzo(a)anthracene		5.2	<0.47	28.1	<0.44	6.2	<0.46	<0.46	0.7	7	
Benzo(a)pyrene		4.8	<0.47	19.2	<0.44	5.5	<0.46	<0.46	0.9	2	
Benzo(b)fluoranthene		4.5	<0.47	28.2	<0.44	5.9	<0.46	<0.46	0.6	7	
Benzo(g,h,i)perylene		2.9	<0.47	9.6	<0.44	3.4	<0.46	<0.46	0.8	1,000	
Benzo(k)fluoranthene		3.9	<0.47	10.8	<0.44	2.9	<0.46	<0.46	0.6	70	
Chrysene		5.0	<0.47	23.6	<0.44	5.5	<0.46	<0.46	0.7	70	
Dibenzo(a,h)anthracene		1.0	<0.47	3.8	<0.44	1.2	<0.46	<0.46	<0.47	0.7	
Fluoranthene		10.5	<0.47	55.7	<0.44	12.5	<0.46	<0.46	1.4	1,000	
Fluorene		0.7	<0.47	4.7	<0.44	0.8	<0.46	<0.46	<0.47	1,000	
Indeno(1,2,3-cd)pyrene		2.9	<0.47	11.4	<0.44	3.4	<0.46	<0.46	<0.47	7	
2-Methylnaphthalene		<0.44	<0.47	<0.47	<0.44	<0.45	<0.46	<0.46	<0.47	80/300	
Naphthalene		<0.44	<0.47	<0.47	<0.44	<0.45	<0.46	<0.46	<0.47	20/500	
Phenanthrene		6.7	<0.47	44.5	<0.44	9.1	<0.46	<0.46	0.8	500	
Pyrene		7.9	<0.47	39.2	<0.44	9.5	<0.46	<0.46	1.1	1,000	
VOLATILE PETROLEUM HYDROCARBONS (mg/kg)											
C5- C8 Aliphatics		<5.7	<5.4	<5.0	<5.1	<5.7	<5.8	<9.1	<5.2	100	
C9- C12 Aliphatics		<5.7	<5.4	<5.0	<5.1	<5.7	<5.8	<9.1	<5.2	1,000	
C9- C10 Aromatics		<5.7	<5.4	<5.0	<5.1	<5.7	<5.8	<9.1	<5.2	100	
Benzene		<0.28	<0.27	<0.25	<0.26	<0.29	<0.29	<0.46	<0.26	40	
Ethylbenzene		<0.28	<0.27	<0.25	<0.26	<0.29	<0.29	<0.46	<0.26	500	
Methyl Tert Butyl Ether		<0.057	<0.054	<0.050	<0.051	<0.057	<0.058	<0.091	<0.052	100	
Naphthalene		<0.28	<0.27	<0.25	<0.26	<0.29	<0.29	<0.46	<0.26	20/500	
Toluene		<0.28	<0.27	<0.25	<0.26	<0.29	<0.29	<0.46	<0.26	500	
Total Xylenes		<0.56	<0.54	<0.50	<0.52	<0.58	<0.58	<0.92	<0.52	100/500	

NOTES:

mg/kg is milligrams per kilogram.

BDL is below the instrument detection limit of 0.5 ppmv.

PID is photoionization detector.

<2.0 indicates not detected at or above the laboratory reporting limit of 2.0 mg/kg.

ppmv is parts per million by volume.

Analytes detected above the method reporting limit are in **Red**.Analytes detected above MCP Method 1 Soil Standards are in **Red**.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Maggore Somerville
343-351 Summer Street
Somerville Massachusetts

Sample Date Monitoring Well ID Depth to Groundwater (feet) Screen Interval BGS (feet) Depth of Well (feet)	August 17, 2016										MCP Reportable Concentrations (µg/L)	MCP Method 1 Groundwater Standards (µg/L)	
	MW-1	MW-2	MW-3	MW-103	MW-105	MW-106	MW-107	MW-108	B-2/MW	B-3/MW		GW-2	GW-3
	14.30 9-19 22	12.60 9-19 22	16.58 9-19 22	16.81 10-20 20	11.31 10-20 20	10.41 8-18 18	13.17 10-20 20	19.50 10-20 20	12.22 UNK 15	11.97 UNK 15		RCGW-2	
	VOLATILE ORGANIC COMPOUNDS by 8260 (µg/L)												
Acetone	<10	<10	<10	14.5	<10	<10	<10	<10	<10	<10	50,000	50,000	50,000
Benzene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,000	1,000	10,000
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10,000	NE	NE
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6	6	50,000
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	700	700	50,000
Bromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	7	7	800
2-Butanone (MEK)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	50,000	50,000	50,000
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
Carbon disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10,000	NE	NE
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2	2	5,000
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	200	200	1,000
Chloroethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	10,000	NE	NE
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	50	50	20,000
Chloromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	10,000	NE	NE
o-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10,000	NE	NE
p-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
Di-Isopropyl ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	10,000	NE	NE
1,2-Dibromo-3-chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1,000	NE	NE
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	20	50,000
1,2-Dibromoethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2	2	50,000
1,2-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2,000	8,000	2,000
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6,000	6,000	50,000
1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	60	60	8,000
Dichlorodifluoromethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	100,000	NE	NE
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2,000	2,000	20,000
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5	5	20,000
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	80	80	30,000
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	20	50,000
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	80	80	50,000
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3	3	50,000
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50,000	NE	NE
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NE	NE	NE
cis-1,3-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5	5	NE
trans-1,3-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5	5	NE

NOTES:

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µg/L is micrograms per liter.
NE is not established
BGS is below ground surface.

MTBE is methyl tert butyl ether.
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Analytes detected above applicable MCP groundwater standards are in **Red**.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Maggore Somerville
343-351 Summer Street
Somerville, Massachusetts

Sample Date	August 17, 2016										MCP Reportable Concentrations (µg/L)	MCP Method 1 Groundwater Standards (µg/L)		
	Monitoring Well ID											RCGW-2	GW-2	GW-3
	MW-1	MW-2	MW-3	MW-103	MW-105	MW-106	MW-107	MW-108	B-2/MW	B-3/MW				
Depth to Groundwater (feet)	14.30	12.60	16.58	16.81	11.31	10.41	13.17	19.50						
Screen Interval BGS (feet)	9-19	9-19	9-19	10-20	10-20	8-18	10-20	10-20	10-20	UNK	UNK			
Depth of Well (feet)	22	22	22	20	20	18	20	20	20	15	15			
1,4-Dioxane	<25	<25	<25	<25	<25	<25	<25	-	<25	<25	6,000	6,000	50,000	
Ethyl Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	10,000	10,000	NE	
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	5,000	5,000	5,000	
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	50	50	3,000	
2-Hexanone	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	10,000	10,000	NE	
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	100,000	100,000	NE	
p-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	NE	NE	NE	
Methyl Tert Butyl Ether	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	5,000	5,000	50,000	
4-Methyl-2-pentanone (MIBK)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	50,000	50,000	50,000	
Methylene bromide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	50,000	50,000	NE	
Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	2,000	2,000	50,000	
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	700	700	20,000	
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	10,000	10,000	NE	
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	100	100	6,000	
tert-Amyl Methyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	NE	NE	NE	
tert-Butyl Ethyl Ether	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	NE	NE	NE	
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	100	100	50,000	
1,1,2,2-Tetrachloroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-	<0.50	<0.50	9	9	50,000	
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	50	50	30,000	
Tetrahydrofuran	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	50,000	50,000	NE	
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	40,000	40,000	40,000	
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	NE	NE	NE	
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	200	200	50,000	
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	4,000	4,000	20,000	
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	900	900	50,000	
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	5	5	5,000	
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	100,000	100,000	NE	
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	10,000	10,000	NE	
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	100,000	100,000	NE	
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	1,000	1,000	NE	
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	2	2	50,000	
m,p-Xylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	3,000	3,000	5,000	
o-Xylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	3,000	3,000	5,000	
Xylene (total)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	3,000	3,000	5,000	

NOTES:

-- is not applicable or not analyzed.
µg/L is micrograms per liter.
NE is not established.
BGS is below ground surface.

MTBE is methyl tert butyl ether.

<2.0 is not detected at or above the laboratory reporting limit of 2.0 µg/L.

Analytes detected above the method reporting limit are in **Bold**.

Analytes detected above applicable MCP groundwater standards are in **Red**.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Maggiori Somerville
343-351 Summer Street
Somerville, Massachusetts

Sample Date Monitoring Well ID Depth to Groundwater (feet) Screen Interval BGS (feet) Depth of Well (feet)	August 17, 2016										MCP Reportable Concentrations (µg/L)	MCP Method 1 Groundwater Standards (µg/L)
	MW-1	MW-2	MW-3	MW-103	MW-105	MW-106	MW-107	MW-108	B-2/MW	B-3/MW		
	14.30 9-19	12.60 9-19	16.58 9-19	16.81 10-20	11.31 10-20	10.41 8-18	13.17 10-20	19.50 10-20	12.22 UNK	11.97 UNK	RCGW-2	GW-2 GW-3
VOLATILE PETROLEUM HYDROCARBONS (µg/L)												
C5-C8 Aliphatics	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	3,000	3,000
C9-C12 Aliphatics	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	5,000	5,000
C9-C10 Aromatics	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	4,000	50,000
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	1,000	10,000
Ethylbenzene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	20,000	5,000
MTBE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	5,000	50,000
Naphthalene	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	-	<3.0	<3.0	700	20,000
Toluene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	40,000	40,000
Xylenes (total)	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-	<4.0	<4.0	3,000	5,000
EXTRACTABLE PETROLEUM HYDROCARBONS (µg/L)												
C9-C18 Aliphatics	<110	<110	<120	<120	<110	<120	<130	<100	<110	<110	5,000	50,000
C19-C36 Aliphatics	<110	362	<120	<120	<110	<120	<130	<100	<110	<110	50,000	50,000
C11-C22 Aromatics	<110	<110	<120	<120	<110	<120	<130	<100	<110	<110	5,000	5,000
Acenaphthene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	600	10,000
Acenaphthylene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	40	40
Anthracene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	30	30
Benzo(a)anthracene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	1,000	1,000
Benzo(a)pyrene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	500	500
Benzo(b)fluoranthene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	400	400
Benzo(g,h,i)perylene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	20	20
Benzo(k)fluoranthene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	100	100
Chrysene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	70	70
Dibenz(a,h)anthracene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	40	40
Fluoranthene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	200	200
Fluorene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	40	40
Indeno(1,2,3-cd)pyrene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	100	100
2-Methylnaphthalene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	2,000	20,000
Naphthalene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	700	20,000
Phenanthrene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	10,000	10,000
Pyrene	<5.5	<5.6	<5.9	<6.1	<5.6	<5.8	<6.3	<5.1	<5.6	<5.6	20	20
METALS (µg/L)												
Antimony	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	-	<6.0	<6.0	8,000	8,000
Arsenic	29.5	4.4	<4.0	24.3	<4.0	6	<4.0	-	<4.0	5.7	900	900
Barium	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	50,000	50,000
Beryllium	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-	<4.0	<4.0	200	200
Cadmium	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	-	<4.0	<4.0	4	4
Chromium	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	300	300
Lead	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	10	10
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	<0.20	<0.20	20	20
Nickel	<40	<40	<40	<40	<40	<40	<40	-	<40	<40	200	200
Selenium	<10	<10	<10	<10	11.6	<10	11.3	-	<10	<10	100	100
Silver	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	7	7
Thallium	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	3,000	3,000
Vanadium	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	4,000	4,000
Zinc	<20	<20	<20	<20	26.1	<20	<20	-	<20	<20	900	900

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APPENDIX A
LABORATORY REPORTS

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Technical Report for

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

03.990202.00

SGS Accutest Job Number: MC47325

Sampling Date: 08/12/16

Report to:

EnviroTrac

denat@envirotrac.com

ATTN: Dena Tomassi

Total number of pages in report: 119



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579)
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DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

EnviroTrac
Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00
Job No: MC47325

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
MC47325-1	08/12/16	10:00 FM	08/16/16	SO Soil	S-1
MC47325-2	08/12/16	11:15 FM	08/16/16	SO Soil	S-2
MC47325-3	08/12/16	12:00 FM	08/16/16	SO Soil	S-3
MC47325-4	08/12/16	11:00 FM	08/16/16	SO Soil	S-4
MC47325-5	08/12/16	12:30 FM	08/16/16	SO Soil	S-5
MC47325-6	08/12/16	12:35 FM	08/16/16	SO Soil	S-6
MC47325-7	08/12/16	13:00 FM	08/16/16	SO Soil	S-7
MC47325-8	08/12/16	13:15 FM	08/16/16	SO Soil	S-8
MC47325-9	08/12/16	14:00 FM	08/16/16	SO Soil	STOCKPILE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix:	SO	Batch ID:	GAB5243
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC47325-7: Soil to methanol ratio less than 0.75 to 1.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix:	SO	Batch ID:	OP48449
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- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC47325-9 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference.
- OP48449-BS/BSD for C11-C22 Aromatics (Unadj.): Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.
- RPD(s) for OP48449-BS/SD for C9-C18 Aliphatics, C19-C36 Aliphatics: Range recovery satisfactory.
- MC47325-3 for o-Terphenyl: Outside control limits due to matrix interference. Confirmed by reanalysis.

Extractables by GC By Method SW846 8082A

Matrix:	SO	Batch ID:	OP48455
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- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix:	SO	Batch ID:	MP26648
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- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC47344-1PS, MC47344-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Beryllium, Cadmium, Silver are outside control limits for sample MP26648-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MC47325-9 for Silver: Elevated RL due to dilution required for matrix interference.

Metals By Method SW846 7471B

Matrix:	SO	Batch ID:	MP26651
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- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 120.1M

Matrix:	SO	Batch ID:	GN54598
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EnviroTrac **Job No:** MC47325

Site: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA **Report Date** 8/25/2016 3:16:44 PM
9 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/12/2016 and were received at SGS Accutest New England on 08/16/2016 properly preserved, at 2.6 Deg. C and intact. These Samples received a job number of MC47325. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix:	SO	Batch ID:	MSL4331
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MSL4331-BS/BSD for 2-Butanone (MEK), Bromomethane: Outside control limits. Associated samples are non-detect for this compound.
- MSL4331-BS/BS/SD for Dichlorodifluoromethane, 1,4-Dioxane (BSD only) are outside MCP criteria.
- Continuing cahbration check standard MSL4331-CC4322 for 1,4-dioxane exceed 20% Difference.
- The response factor (RF) for the 2-Butanone and Acetone low point (0.046 and 0.046) and average point (0.046 and 0.044) in the initial calibration MSL4322-ICC4322 are less than the required RF of 0.1 as noted in Table 4 of SW846 8260C.
- Continuing calibration check standard MSL4331-CC4322 for dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, 2,2-dichloropropane exceed 20% Difference (response biased high) Associated samples are non-detect for this compound.
- Quadratic regression is employed for initial calibration standard MSI 4322-1CC4322 for bromomethane, chloroethane, m,p-xylene.

Extractables by GCMS By Method SW846 8270D

Matrix:	SO	Batch ID:	OP48454
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- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC47325-9: Elevated RL due to dilution required for matrix interference.
- MC47325-9 for Nitrobenzene-d5, 2,4,6-Tribromophenol: Outside control limits due to matrix interference compounded by dilution.
- RPD(s) for 4-Chloroaniline are outside control limits. Individual spike recoveries within in-house acceptance limits.
- OP48454-BS/SD for Aniline, 4-Chloroaniline, 3,3'-Dichlorobenzidine are outside MCP criteria
- OP48454-BS for 3,3'-Dichlorobenzidine are outside MCP criteria.
- Quadratic regression is employed for initial calibration standard MSW1188-ICC1188 for Benzoic acid, Hexachlorocyclopentadiene, 2,4-Dinitrotoluene, 2,4,6-Tribromophenol, Pentachlorophenol.
- Continuing calibration check standard MSW1189-CC1188 for Benzoic acid exceed 20% Difference (response biased high). Associated samples are non-detect for this compound.
- Initial calibration verification MSW1188-ICV1188 for 2,4-Dinitrophenol, Benzoic acid exceed 30% Difference (response biased high).

Summary of Hits

Job Number: MC47325
Account: EnviroTrac
Project: Maggione Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC47325-1	S-1					
Acenaphthene		0.618	0.44		mg/kg	MADEP EPH REV 1.1
Anthracene		1.71	0.44		mg/kg	MADEP EPH REV 1.1
Benz(a)anthracene		5.15	0.44		mg/kg	MADEP EPH REV 1.1
Benz(a)pyrene		4.84	0.44		mg/kg	MADEP EPH REV 1.1
Benz(b)fluoranthene		4.48	0.44		mg/kg	MADEP EPH REV 1.1
Benz(g,h,i)perylene		2.86	0.44		mg/kg	MADEP EPH REV 1.1
Benz(k)fluoranthene		3.88	0.44		mg/kg	MADEP EPH REV 1.1
Chrysene		5.00	0.44		mg/kg	MADEP EPH REV 1.1
Dibenz(a,h)anthracene		0.957	0.44		mg/kg	MADEP EPH REV 1.1
Fluoranthene		10.5	0.44		mg/kg	MADEP EPH REV 1.1
Fluorene		0.712	0.44		mg/kg	MADEP EPH REV 1.1
Indeno(1,2,3-cd)pyrene		2.86	0.44		mg/kg	MADEP EPH REV 1.1
Phenanthrene		6.73	0.44		mg/kg	MADEP EPH REV 1.1
Pyrene		7.92	0.44		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		200	18		mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics		76.6	18		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics		142	18		mg/kg	MADEP EPH REV 1.1

MC47325-2 S-2

No hits reported in this sample.

MC47325-3 S-3

Acenaphthene	1.73	0.47	mg/kg	MADEP EPH REV 1.1
Acenaphthylene	2.45	0.47	mg/kg	MADEP EPH REV 1.1
Anthracene	11.9	0.47	mg/kg	MADEP EPH REV 1.1
Benz(a)anthracene	28.1	0.47	mg/kg	MADEP EPH REV 1.1
Benz(a)pyrene	19.2	0.47	mg/kg	MADEP EPH REV 1.1
Benz(b)fluoranthene	28.2	0.47	mg/kg	MADEP EPH REV 1.1
Benz(g,h,i)perylene	9.59	0.47	mg/kg	MADEP EPH REV 1.1
Benz(k)fluoranthene	10.8	0.47	mg/kg	MADEP EPH REV 1.1
Chrysene	23.6	0.47	mg/kg	MADEP EPH REV 1.1
Dibenz(a,h)anthracene	3.81	0.47	mg/kg	MADEP EPH REV 1.1
Fluoranthene	55.7	2.4	mg/kg	MADEP EPH REV 1.1
Fluorene	4.67	0.47	mg/kg	MADEP EPH REV 1.1
Indeno(1,2,3-cd)pyrene	11.4	0.47	mg/kg	MADEP EPH REV 1.1
Phenanthrene	44.5	2.4	mg/kg	MADEP EPH REV 1.1
Pyrene	39.2	2.4	mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)	950	94	mg/kg	MADEP EPH REV 1.1
C9-C18 Aliphatics	11.7	9.4	mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics	95.3	19	mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics	655	19	mg/kg	MADEP EPH REV 1.1

Wet Chemistry By Method SW846 CHAP7

Matrix: SO	Batch ID: GP20744
<ul style="list-style-type: none">All samples were distilled within the recommended method holding time.All samples were analyzed within the recommended method holding time.All method blanks for this batch meet method specific criteria	

Matrix: SO	Batch ID: GP20745
<ul style="list-style-type: none">All samples were distilled within the recommended method holding timeAll samples were analyzed within the recommended method holding time.All method blanks for this batch meet method specific criteria.	

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC47325).

Summary of Hits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(k)fluoranthene		0.574	0.47		mg/kg	MADEP EPH REV 1.1
Chrysene		0.696	0.47		mg/kg	MADEP EPH REV 1.1
Fluoranthene		1.42	0.47		mg/kg	MADEP EPH REV 1.1
Phenanthrene		0.779	0.47		mg/kg	MADEP EPH REV 1.1
Pyrene		1.10	0.47		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		136	19		mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics		226	19		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics		128	19		mg/kg	MADEP EPH REV 1.1
STOCKPILE						
MC47325-9						
Benzene		0.523	0.17		mg/kg	SW846 8260C
n-Butylbenzene		8.83	1.7		mg/kg	SW846 8260C
sec-Butylbenzene		2.59	1.7		mg/kg	SW846 8260C
1,2-Dichlorobenzene		0.877	0.66		mg/kg	SW846 8260C
Ethylbenzene		13.1	0.66		mg/kg	SW846 8260C
Isopropylbenzene		3.52	1.7		mg/kg	SW846 8260C
p-Isopropyltoluene		2.24	1.7		mg/kg	SW846 8260C
Naphthalene		48.7	1.7		mg/kg	SW846 8260C
n-Propylbenzene		13.5	1.7		mg/kg	SW846 8260C
Styrene		1.85	1.7		mg/kg	SW846 8260C
Toluene		13.5	1.7		mg/kg	SW846 8260C
1,2,4-Trimethylbenzene		127	1.7		mg/kg	SW846 8260C
1,3,5-Trimethylbenzene		29.9	1.7		mg/kg	SW846 8260C
m,p-Xylene		60.6	0.66		mg/kg	SW846 8260C
o-Xylene		29.9	0.66		mg/kg	SW846 8260C
Xylene (total)		90.5	0.66		mg/kg	SW846 8260C
Anthracene ^a		5.36	3.2		mg/kg	SW846 8270D
Benzo(a)anthracene ^a		14.9	3.2		mg/kg	SW846 8270D
Benzo(a)pyrene ^a		13.8	8.0		mg/kg	SW846 8270D
Benzo(b)fluoranthene ^a		11.7	3.2		mg/kg	SW846 8270D
Benzo(g,h,i)perylene ^a		9.17	3.2		mg/kg	SW846 8270D
Benzo(k)fluoranthene ^a		10.9	3.2		mg/kg	SW846 8270D
Chrysene ^a		13.8	3.2		mg/kg	SW846 8270D
Dibenzo(a,h)anthracene ^a		3.51	3.2		mg/kg	SW846 8270D
Fluoranthene ^a		33.8	3.2		mg/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene ^a		9.55	8.0		mg/kg	SW846 8270D
2-Methylnaphthalene ^a		59.4	3.2		mg/kg	SW846 8270D
Naphthalene ^a		46.3	3.2		mg/kg	SW846 8270D
Phenanthrene ^a		18.9	3.2		mg/kg	SW846 8270D
Pyrene ^a		28.0	3.2		mg/kg	SW846 8270D
Benzene		0.434	0.31		mg/kg	MADEP VPH REV 1.1
Ethylbenzene		13.6	0.31		mg/kg	MADEP VPH REV 1.1
Naphthalene		23.3	0.31		mg/kg	MADEP VPH REV 1.1
Toluene		11.0	0.31		mg/kg	MADEP VPH REV 1.1

Summary of Hits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC47325-4	S-4					
No hits reported in this sample.						
MC47325-5	S-5					
Acenaphthene		0.682	0.45		mg/kg	MADEP EPH REV 1.1
Anthracene		1.94	0.45		mg/kg	MADEP EPH REV 1.1
Benzo(a)anthracene		6.18	0.45		mg/kg	MADEP EPH REV 1.1
Benzo(a)pyrene		5.53	0.45		mg/kg	MADEP EPH REV 1.1
Benzo(b)fluoranthene		5.89	0.45		mg/kg	MADEP EPH REV 1.1
Benzo(g,h,i)perylene		3.41	0.45		mg/kg	MADEP EPH REV 1.1
Benzo(k)fluoranthene		2.91	0.45		mg/kg	MADEP EPH REV 1.1
Chrysene		5.49	0.45		mg/kg	MADEP EPH REV 1.1
Dibenz(a,h)anthracene		1.15	0.45		mg/kg	MADEP EPH REV 1.1
Fluoranthene		12.5	0.45		mg/kg	MADEP EPH REV 1.1
Fluorene		0.794	0.45		mg/kg	MADEP EPH REV 1.1
Indeno(1,2,3-cd)pyrene		3.35	0.45		mg/kg	MADEP EPH REV 1.1
Phenanthrene		9.08	0.45		mg/kg	MADEP EPH REV 1.1
Pyrene		9.47	0.45		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		230	18		mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics		64.9	18		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics		161	18		mg/kg	MADEP EPH REV 1.1
MC47325-6	S-6					
C11-C22 Aromatics (Unadj.)		296	18		mg/kg	MADEP EPH REV 1.1
C9-C18 Aliphatics		13.4	9.1		mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics		488	18		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics		294	18		mg/kg	MADEP EPH REV 1.1
MC47325-7	S-7					
C11-C22 Aromatics (Unadj.)		172	19		mg/kg	MADEP EPH REV 1.1
C9-C18 Aliphatics		10.3	9.3		mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics		380	19		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics		171	19		mg/kg	MADEP EPH REV 1.1
MC47325-8	S-8					
Benzo(a)anthracene		0.676	0.47		mg/kg	MADEP EPH REV 1.1
Benzo(a)pyrene		0.929	0.47		mg/kg	MADEP EPH REV 1.1
Benzo(b)fluoranthene		0.570	0.47		mg/kg	MADEP EPH REV 1.1
Benzo(g,h,i)perylene		0.791	0.47		mg/kg	MADEP EPH REV 1.1

Section 4

4

Sample Results

Report of Analysis

Summary of Hits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
m,p-Xylene		39.4	0.31		mg/kg	MADEP VPH REV 1.1
o-Xylene		23.7	0.31		mg/kg	MADEP VPH REV 1.1
C5- C8 Aliphatics (Unadj.)		130	6.3		mg/kg	MADEP VPH REV 1.1
C9- C12 Aliphatics (Unadj.)		1040	6.3		mg/kg	MADEP VPH REV 1.1
C9- C10 Aromatics (Unadj.)		566	6.3		mg/kg	MADEP VPH REV 1.1
C5- C8 Aliphatics		118	6.3		mg/kg	MADEP VPH REV 1.1
C9- C12 Aliphatics		398	6.3		mg/kg	MADEP VPH REV 1.1
Acenaphthene		2.55	0.50		mg/kg	MADEP EPH REV 1.1
Anthracene		0.903	0.50		mg/kg	MADEP EPH REV 1.1
Benzo(a)anthracene		3.28	0.50		mg/kg	MADEP EPH REV 1.1
Chrysene		3.29	0.50		mg/kg	MADEP EPH REV 1.1
Fluoranthene		5.28	0.50		mg/kg	MADEP EPH REV 1.1
Fluorene		2.78	0.50		mg/kg	MADEP EPH REV 1.1
2-Methylnaphthalene		41.4	2.5		mg/kg	MADEP EPH REV 1.1
Naphthalene		24.1	0.50		mg/kg	MADEP EPH REV 1.1
Phenanthrene		4.55	0.50		mg/kg	MADEP EPH REV 1.1
Pyrene		4.59	0.50		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		2440	99		mg/kg	MADEP EPH REV 1.1
C9-C18 Aliphatics		1390	9.9		mg/kg	MADEP EPH REV 1.1
C19-C36 Aliphatics		5850	20		mg/kg	MADEP EPH REV 1.1
C11-C22 Aromatics		2350	20		mg/kg	MADEP EPH REV 1.1
Aroclor 1260		0.101	0.035		mg/kg	SW846 8082A
Arsenic		12.0	0.88		mg/kg	SW846 6010C
Barium		100	4.4		mg/kg	SW846 6010C
Beryllium		0.55	0.35		mg/kg	SW846 6010C
Cadmium		0.74	0.35		mg/kg	SW846 6010C
Chromium		22.6	0.88		mg/kg	SW846 6010C
Lead		350	0.88		mg/kg	SW846 6010C
Nickel		16.1	3.5		mg/kg	SW846 6010C
Vanadium		32.8	0.88		mg/kg	SW846 6010C
Zinc		186	1.8		mg/kg	SW846 6010C
Ignitability (Flashpoint)		> 230			Deg. F	SW846 1020
Specific Conductivity		260	0.50		umhos/cm	EPA 120.1M
pH		7.8			su	SW846 9045D

(a) Elevated RL due to dilution required for matrix interference.

Report of Analysis

Client Sample ID:	S-1	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-1	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	96.5
Method:	MADEP EPH REV 1.1		
Project:	SW846 3546		
	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15309.D	1	08/24/16	TA	08/17/16	OP48449	GDE854

Run #1	Initial Weight	Final Volume
Run #2	11.7 g	2.0 ml

CAS No. Compound Result RL Units Q

83-32-9	Acenaphthene	0.618	0.44	mg/kg	
208-96-8	Acenaphthylene	ND	0.44	mg/kg	
120-12-7	Anthracene	1.71	0.44	mg/kg	
56-55-3	Benzo(a)anthracene	5.15	0.44	mg/kg	
50-32-8	Benzo(a)pyrene	4.84	0.44	mg/kg	
205-99-2	Benzo(b)fluoranthene	4.48	0.44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	2.86	0.44	mg/kg	
207-08-9	Benzo(k)fluoranthene	3.88	0.44	mg/kg	
218-01-9	Chrysene	5.00	0.44	mg/kg	
53-70-3	Dibenz(a,h)anthracene	0.957	0.44	mg/kg	
206-44-0	Fluoranthene	10.5	0.44	mg/kg	
86-73-7	Fluorene	0.712	0.44	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2.86	0.44	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.44	mg/kg	
91-20-3	Naphthalene	ND	0.44	mg/kg	
85-01-8	Phenanthrene	6.73	0.44	mg/kg	
129-00-0	Pyrene	7.92	0.44	mg/kg	
	C11-C22 Aromatics (Unadj.)	200	18	mg/kg	
	C9-C18 Aliphatics	ND	8.8	mg/kg	
	C19-C36 Aliphatics	76.6	18	mg/kg	
	C11-C22 Aromatics	142	18	mg/kg	

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

84-15-1	o-Terphenyl	132%		40-140%
321-60-8	2-Fluorobiphenyl	73%		40-140%
580-13-2	2-Bromonaphthalene	78%		40-140%
3386-33-2	1-Chlorooctadecane	93%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-1	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-1	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	96.5
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	AB94983.D	1	08/18/16	DF	n/a	n/a	GAB5243

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #2	15.1 g	16.0 ml	100 ul

MA-VPH List

CAS No. Compound Result RL Units Q

71-43-2	Benzene	ND	0.28	mg/kg	
100-41-4	Ethylbenzene	ND	0.28	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.057	mg/kg	
91-20-3	Naphthalene	ND	0.28	mg/kg	
108-88-3	Toluene	ND	0.28	mg/kg	
	m,p-Xylene	ND	0.28	mg/kg	
95-47-6	o-Xylene	ND	0.28	mg/kg	
	C5- C8 Aliphatics (Unadj.)	ND	5.7	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.7	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.7	mg/kg	
	C5- C8 Aliphatics	ND	5.7	mg/kg	
	C9- C12 Aliphatics	ND	5.7	mg/kg	

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

	2,3,4-Trifluorotoluene	74%		70-130%
	2,3,4-Trifluorotoluene	76%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-2	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-2	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	95.6
Method:	MADEP EPH REV 1.1		
Project:	SW846 3546 Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15277.D	1	08/23/16	TA	08/17/16	OP48449	GDE853
Run #2							

Run #	Initial Weight	Final Volume
Run #1	11.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.47	mg/kg	
208-96-8	Acenaphthylene	ND	0.47	mg/kg	
120-12-7	Anthracene	ND	0.47	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.47	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.47	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.47	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.47	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.47	mg/kg	
218-01-9	Chrysene	ND	0.47	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.47	mg/kg	
206-44-0	Fluoranthene	ND	0.47	mg/kg	
86-73-7	Fluorene	ND	0.47	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.47	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.47	mg/kg	
91-20-3	Naphthalene	ND	0.47	mg/kg	
85-01-8	Phenanthrene	ND	0.47	mg/kg	
129-00-0	Pyrene	ND	0.47	mg/kg	
	C11-C22 Aromatics (Unadj.)	ND	19	mg/kg	
	C9-C18 Aliphatics	ND	9.5	mg/kg	
	C19-C36 Aliphatics	ND	19	mg/kg	
	C11-C22 Aromatics	ND	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		40-140%
321-60-8	2-Fluorobiphenyl	82%		40-140%
580-13-2	2-Bromonaphthalene	78%		40-140%
3386-33-2	1-Chlorooctadecane	101%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-2	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-2	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	95.6
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94984.D	1	08/18/16	DF	n/a	n/a	GAB5243
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	16.1 g	16.0 ml	100 ul
Run #2			

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.27	mg/kg	
100-41-4	Ethylbenzene	ND	0.27	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.054	mg/kg	
91-20-3	Naphthalene	ND	0.27	mg/kg	
108-88-3	Toluene	ND	0.27	mg/kg	
	m,p-Xylene	ND	0.27	mg/kg	
	o-Xylene	ND	0.27	mg/kg	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	5.4	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.4	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.4	mg/kg	
	C5- C8 Aliphatics	ND	5.4	mg/kg	
	C9- C12 Aliphatics	ND	5.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	75%		70-130%
	2,3,4-Trifluorotoluene	77%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-3	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-3	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	94.0
Method:	MADEP EPH REV 1.1 SW846 3546		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15278.D	1	08/23/16	TA	08/17/16	OP48449	GDE853
Run #2	DE15301.D	5	08/24/16	TA	08/17/16	OP48449	GDE854

Run #	Initial Weight	Final Volume
Run #1	11.3 g	2.0 ml
Run #2	11.3 g	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	1.73	0.47	mg/kg	
208-96-8	Acenaphthylene	2.45	0.47	mg/kg	
120-12-7	Anthracene	11.9	0.47	mg/kg	
56-55-3	Benzo(a)anthracene	28.1	0.47	mg/kg	
50-32-8	Benzo(a)pyrene	19.2	0.47	mg/kg	
205-99-2	Benzo(b)fluoranthene	28.2	0.47	mg/kg	
191-24-2	Benzo(g,h,i)perylene	9.59	0.47	mg/kg	
207-08-9	Benzo(k)fluoranthene	10.8	0.47	mg/kg	
218-01-9	Chrysene	23.6	0.47	mg/kg	
53-70-3	Dibenz(a,h)anthracene	3.81	0.47	mg/kg	
206-44-0	Fluoranthene	55.7 ^a	2.4	mg/kg	
86-73-7	Fluorene	4.67	0.47	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	11.4	0.47	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.47	mg/kg	
91-20-3	Naphthalene	ND	0.47	mg/kg	
85-01-8	Phenanthrene	44.5 ^a	2.4	mg/kg	
129-00-0	Pyrene	39.2 ^a	2.4	mg/kg	
	C11-C22 Aromatics (Unadj.)	950 ^a	94	mg/kg	
	C9-C18 Aliphatics	11.7	9.4	mg/kg	
	C19-C36 Aliphatics	95.3	19	mg/kg	
	C11-C22 Aromatics	655	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	225% ^b	211% ^b	40-140%
321-60-8	2-Fluorobiphenyl	90%	79%	40-140%
580-13-2	2-Bromonaphthalene	77%	60%	40-140%
3386-33-2	1-Chlorooctadecane	87%	68%	40-140%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-3	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-3	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	94.0
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94985.D	1	08/18/16	DF	n/a	n/a	GAB5243
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	18.4 g	16.0 ml	100 ul
Run #2			

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.25	mg/kg	
100-41-4	Ethylbenzene	ND	0.25	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.050	mg/kg	
91-20-3	Naphthalene	ND	0.25	mg/kg	
108-88-3	Toluene	ND	0.25	mg/kg	
	m,p-Xylene	ND	0.25	mg/kg	
95-47-6	o-Xylene	ND	0.25	mg/kg	
	C5- C8 Aliphatics (Unadj.)	ND	5.0	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.0	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.0	mg/kg	
	C5- C8 Aliphatics	ND	5.0	mg/kg	
	C9- C12 Aliphatics	ND	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	75%		70-130%
	2,3,4-Trifluorotoluene	76%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-4		Date Sampled: 08/12/16
Lab Sample ID: MC47325-4		Date Received: 08/16/16
Matrix: SO - Soil		Percent Solids: 97.9
Method: MADEP EPH REV 1.1 SW846 3546		
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15279.D	1	08/23/16	TA	08/17/16	OP48449	GDE853
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	11.5 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.44	mg/kg	
208-96-8	Acenaphthylene	ND	0.44	mg/kg	
120-12-7	Anthracene	ND	0.44	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.44	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.44	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.44	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.44	mg/kg	
218-01-9	Chrysene	ND	0.44	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.44	mg/kg	
206-44-0	Fluoranthene	ND	0.44	mg/kg	
86-73-7	Fluorene	ND	0.44	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.44	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.44	mg/kg	
91-20-3	Naphthalene	ND	0.44	mg/kg	
85-01-8	Phenanthrene	ND	0.44	mg/kg	
129-00-0	Pyrene	ND	0.44	mg/kg	
	C11-C22 Aromatics (Unadj.)	ND	18	mg/kg	
	C9-C18 Aliphatics	ND	8.9	mg/kg	
	C19-C36 Aliphatics	ND	18	mg/kg	
	C11-C22 Aromatics	ND	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		40-140%
321-60-8	2-Fluorobiphenyl	78%		40-140%
580-13-2	2-Bromonaphthalene	87%		40-140%
3386-33-2	1-Chlorooctadecane	95%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-4		Date Sampled: 08/12/16
Lab Sample ID: MC47325-4		Date Received: 08/16/16
Matrix: SO - Soil		Percent Solids: 97.9
Method: MADEP VPH REV 1.1		
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94986.D	1	08/18/16	DF	n/a	n/a	GAB5243
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	16.3 g	16.0 ml	100 ul
Run #2			

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.26	mg/kg	
100-41-4	Ethylbenzene	ND	0.26	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.051	mg/kg	
91-20-3	Naphthalene	ND	0.26	mg/kg	
108-88-3	Toluene	ND	0.26	mg/kg	
	m,p-Xylene	ND	0.26	mg/kg	
	o-Xylene	ND	0.26	mg/kg	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	5.1	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.1	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.1	mg/kg	
	C5- C8 Aliphatics	ND	5.1	mg/kg	
	C9- C12 Aliphatics	ND	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	71%		70-130%
	2,3,4-Trifluorotoluene	73%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-5	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-5	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	96.2
Method:	MADEP EPH REV 1.1		
Project:	SW846 3546 Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15280.D	1	08/23/16	TA	OP48449	GDE853
Run #2						

	Initial Weight	Final Volume
Run #1	11.5 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.682	0.45	mg/kg	
208-96-8	Acenaphthylene	ND	0.45	mg/kg	
120-12-7	Anthracene	1.94	0.45	mg/kg	
56-55-3	Benzo(a)anthracene	6.18	0.45	mg/kg	
50-32-8	Benzo(a)pyrene	5.53	0.45	mg/kg	
205-99-2	Benzo(b)fluoranthene	5.89	0.45	mg/kg	
191-24-2	Benzo(g,h,i)perylene	3.41	0.45	mg/kg	
207-08-9	Benzo(k)fluoranthene	2.91	0.45	mg/kg	
218-01-9	Chrysene	5.49	0.45	mg/kg	
53-70-3	Dibenz(a,h)anthracene	1.15	0.45	mg/kg	
206-44-0	Fluoranthene	12.5	0.45	mg/kg	
86-73-7	Fluorene	0.794	0.45	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3.35	0.45	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.45	mg/kg	
91-20-3	Naphthalene	ND	0.45	mg/kg	
85-01-8	Phenanthrene	9.08	0.45	mg/kg	
129-00-0	Pyrene	9.47	0.45	mg/kg	
	C11-C22 Aromatics (Unadj.)	230	18	mg/kg	
	C9-C18 Aliphatics	ND	9.1	mg/kg	
	C19-C36 Aliphatics	64.9	18	mg/kg	
	C11-C22 Aromatics	161	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	122%		40-140%
321-60-8	2-Fluorobiphenyl	81%		40-140%
580-13-2	2-Bromonaphthalene	90%		40-140%
3386-33-2	1-Chlorooctadecane	88%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-5	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-5	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	96.2
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94987.D	1	08/18/16	DF	n/a	GAB5243
Run #2						

Initial Weight	Final Volume	Methanol Aliquot
Run #1	15.1 g	16.0 ml
Run #2		100 ul

MA-VPII List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.29	mg/kg	
100-41-4	Ethylbenzene	ND	0.29	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.057	mg/kg	
91-20-3	Naphthalene	ND	0.29	mg/kg	
108-88-3	Toluene	ND	0.29	mg/kg	
	m,p-Xylene	ND	0.29	mg/kg	
	o-Xylene	ND	0.29	mg/kg	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	5.7	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.7	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.7	mg/kg	
	C5- C8 Aliphatics	ND	5.7	mg/kg	
	C9- C12 Aliphatics	ND	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	77%		70-130%
	2,3,4-Trifluorotoluene	79%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-6	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-6	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	96.0
Method:	MADEP EPH REV 1.1		
Project:	SW846 3546 Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15281.D	1	08/24/16	TA	08/17/16	OP48449	GDE853
Run #2							

Run #	Initial Weight	Final Volume
Run #1	11.4 g	2.0 ml
Run #2		

CAS No. Compound Result RL Units Q

83-32-9	Acenaphthene	ND	0.46	mg/kg	
208-96-8	Acenaphthylene	ND	0.46	mg/kg	
120-12-7	Anthracene	ND	0.46	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.46	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.46	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.46	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.46	mg/kg	
218-01-9	Chrysene	ND	0.46	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.46	mg/kg	
206-44-0	Fluoranthene	ND	0.46	mg/kg	
86-73-7	Fluorene	ND	0.46	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.46	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.46	mg/kg	
91-20-3	Naphthalene	ND	0.46	mg/kg	
85-01-8	Phenanthrene	ND	0.46	mg/kg	
129-00-0	Pyrene	ND	0.46	mg/kg	
	C11-C22 Aromatics (Unadj.)	296	18	mg/kg	
	C9-C18 Aliphatics	13.4	9.1	mg/kg	
	C19-C36 Aliphatics	488	18	mg/kg	
	C11-C22 Aromatics	294	18	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		40-140%
321-60-8	2-Fluorobiphenyl	94%		40-140%
580-13-2	2-Bromonaphthalene	110%		40-140%
3386-33-2	1-Chlorooctadecane	65%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-6	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-6	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	96.0
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94988.D	1	08/18/16	DF	n/a	n/a	GAB5243
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	14.9 g	16.0 ml	100 ul
Run #2			

MA-VPH Lst

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.29	mg/kg	
100-41-4	Ethylbenzene	ND	0.29	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.058	mg/kg	
91-20-3	Naphthalene	ND	0.29	mg/kg	
108-88-3	Toluene	ND	0.29	mg/kg	
	m,p-Xylene	ND	0.29	mg/kg	
	o-Xylene	ND	0.29	mg/kg	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	5.8	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.8	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.8	mg/kg	
	C5- C8 Aliphatics	ND	5.8	mg/kg	
	C9- C12 Aliphatics	ND	5.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	74%		70-130%
	2,3,4-Trifluorotoluene	77%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-7	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-7	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	94.4
Method:	MADEP EPH REV 1.1		
Project:	SW846 3546 Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15282.D	1	TA	08/17/16	OP48449	GDE853
Run #2						

Initial Weight	Final Volume
Run #1 11.4 g	2.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.46	mg/kg	
208-96-8	Acenaphthylene	ND	0.46	mg/kg	
120-12-7	Anthracene	ND	0.46	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.46	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.46	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.46	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.46	mg/kg	
218-01-9	Chrysene	ND	0.46	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.46	mg/kg	
206-44-0	Fluoranthene	ND	0.46	mg/kg	
86-73-7	Fluorene	ND	0.46	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.46	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.46	mg/kg	
91-20-3	Naphthalene	ND	0.46	mg/kg	
85-01-8	Phenanthrene	ND	0.46	mg/kg	
129-00-0	Pyrene	ND	0.46	mg/kg	
	C11-C22 Aromatics (Unadj.)	172	19	mg/kg	
	C9-C18 Aliphatics	10.3	9.3	mg/kg	
	C19-C36 Aliphatics	380	19	mg/kg	
	C11-C22 Aromatics	171	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		40-140%
321-60-8	2-Fluorobiphenyl	84%		40-140%
580-13-2	2-Bromonaphthalene	95%		40-140%
3386-33-2	1-Chlorooctadecane	80%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-7	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-7	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	94.4
Method:	MADEP VPH REV 1.1		
Project:	343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94989.D	1	DF	n/a	n/a	GAB5243
Run #2						

Initial Weight	Final Volume	Methanol Aliquot
Run #1 9.63 g	16.0 ml	100 ul
Run #2		

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.46	mg/kg	
100-41-4	Ethylbenzene	ND	0.46	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.091	mg/kg	
91-20-3	Naphthalene	ND	0.46	mg/kg	
108-88-3	Toluene	ND	0.46	mg/kg	
	m,p-Xylene	ND	0.46	mg/kg	
95-47-6	o-Xylene	ND	0.46	mg/kg	
	C5- C8 Aliphatics (Unadj.)	ND	9.1	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	9.1	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	9.1	mg/kg	
	C5- C8 Aliphatics	ND	9.1	mg/kg	
	C9- C12 Aliphatics	ND	9.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	73%		70-130%
	2,3,4-Trifluorotoluene	76%		70-130%

(a) Soil to methanol ratio less than 0.75 to 1.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-8	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-8	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	MADEP EPH REV 1.1		
Project:	SW846 3546 Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15284.D	1	08/24/16	TA	OP48449	GDE853
Run #2						

	Initial Weight	Final Volume
Run #1	11.3 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.47	mg/kg	
208-96-8	Acenaphthylene	ND	0.47	mg/kg	
120-12-7	Anthracene	ND	0.47	mg/kg	
56-55-3	Benzo(a)anthracene	0.676	0.47	mg/kg	
50-32-8	Benzo(a)pyrene	0.929	0.47	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.570	0.47	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.791	0.47	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.574	0.47	mg/kg	
218-01-9	Chrysene	0.696	0.47	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.47	mg/kg	
206-44-0	Fluoranthene	1.42	0.47	mg/kg	
86-73-7	Fluorene	ND	0.47	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.47	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.47	mg/kg	
91-20-3	Naphthalene	ND	0.47	mg/kg	
85-01-8	Phenanthrene	0.779	0.47	mg/kg	
129-00-0	Pyrene	1.10	0.47	mg/kg	
	C11-C22 Aromatics (Unadj.)	136	19	mg/kg	
	C9-C18 Aliphatics	ND	9.4	mg/kg	
	C19-C36 Aliphatics	226	19	mg/kg	
	C11-C22 Aromatics	128	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		40-140%
321-60-8	2-Fluorobiphenyl	81%		40-140%
580-13-2	2-Bromonaphthalene	84%		40-140%
3386-33-2	1-Chlorooctadecane	83%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-8	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-8	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94990.D	1	08/18/16	DF	n/a	GAB5243
Run #2						

Initial Weight	Final Volume	Methanol Aliquot
Run #1	17.5 g	16.0 ml
Run #2		100 ul

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	0.26	mg/kg	
100-41-4	Ethylbenzene	ND	0.26	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.052	mg/kg	
91-20-3	Naphthalene	ND	0.26	mg/kg	
108-88-3	Toluene	ND	0.26	mg/kg	
	m,p-Xylene	ND	0.26	mg/kg	
	o-Xylene	ND	0.26	mg/kg	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	5.2	mg/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5.2	mg/kg	
	C9- C10 Aromatics (Unadj.)	ND	5.2	mg/kg	
	C5- C8 Aliphatics	ND	5.2	mg/kg	
	C9- C12 Aliphatics	ND	5.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	74%		70-130%
	2,3,4-Trifluorotoluene	77%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.66	mg/kg	
142-28-9	1,3-Dichloropropane	ND	1.7	mg/kg	
594-20-7	2,2-Dichloropropane	ND	1.7	mg/kg	
563-58-6	1,1-Dichloropropene	ND	1.7	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.66	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.66	mg/kg	
123-91-1	1,4-Dioxane	ND	41	mg/kg	
60-29-7	Ethyl Ether	ND	1.7	mg/kg	
100-41-4	Ethylbenzene	13.1	0.66	mg/kg	
87-68-3	Hexachlorobutadiene	ND	1.7	mg/kg	
591-78-6	2-Hexanone	ND	3.3	mg/kg	
98-82-8	Isopropylbenzene	3.52	1.7	mg/kg	
99-87-6	p-Isopropyltoluene	2.24	1.7	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.66	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1.7	mg/kg	
74-95-3	Methylene bromide	ND	1.7	mg/kg	
75-09-2	Methylene chloride	ND	0.66	mg/kg	
91-20-3	Naphthalene	48.7	1.7	mg/kg	
103-65-1	n-Propylbenzene	13.5	1.7	mg/kg	
100-42-5	Styrene	1.85	1.7	mg/kg	
994-05-8	tert-Amyl Methyl Ether	ND	1.7	mg/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	0.66	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.7	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.66	mg/kg	
127-18-4	Tetrachloroethene	ND	0.66	mg/kg	
109-99-9	Tetrahydrofuran	ND	3.3	mg/kg	
108-88-3	Toluene	13.5	1.7	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	1.7	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1.7	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.66	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.66	mg/kg	
79-01-6	Trichloroethene	ND	0.66	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.66	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	1.7	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	127	1.7	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	29.9	1.7	mg/kg	
75-01-4	Vinyl chloride	ND	0.66	mg/kg	
	m,p-Xylene	60.6	0.66	mg/kg	
95-47-6	o-Xylene	29.9	0.66	mg/kg	
1330-20-7	Xylene (total)	90.5	0.66	mg/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L99676.D	1	08/18/16	TB	n/a	n/a	MSL4331

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #2	13.5 g	15.0 ml	20.0 ul

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	3.3	mg/kg	
71-43-2	Benzene	0.523	0.17	mg/kg	
108-86-1	Bromobenzene	ND	1.7	mg/kg	
74-97-5	Bromochloromethane	ND	1.7	mg/kg	
75-27-4	Bromodichloromethane	ND	0.66	mg/kg	
75-25-2	Bromoform	ND	0.66	mg/kg	
74-83-9	Bromomethane	ND	0.66	mg/kg	
78-93-3	2-Butanone (MEK)	ND	3.3	mg/kg	
104-51-8	n-Butylbenzene	8.83	1.7	mg/kg	
135-98-8	sec-Butylbenzene	2.59	1.7	mg/kg	
98-06-6	tert-Butylbenzene	ND	1.7	mg/kg	
75-15-0	Carbon disulfide	ND	1.7	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.66	mg/kg	
108-90-7	Chlorobenzene	ND	0.66	mg/kg	
75-00-3	Chloroethane	ND	1.7	mg/kg	
67-66-3	Chloroform	ND	0.66	mg/kg	
74-87-3	Chloromethane	ND	1.7	mg/kg	
95-49-8	o-Chlorotoluene	ND	1.7	mg/kg	
106-43-4	p-Chlorotoluene	ND	1.7	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.66	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	mg/kg	
124-48-1	Dibromochloromethane	ND	0.66	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.66	mg/kg	
95-50-1	1,2-Dichlorobenzene	0.877	0.66	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.66	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.66	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.66	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.66	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.66	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.66	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.66	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.66	mg/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8270D SW846 3546		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

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File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 a	W29535.D	20	MR	08/18/16	OP48454	MSW1189
Run #2						

Initial Weight	Final Volume
Run #1 20.7 g	1.5 ml
Run #2	

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	16	mg/kg	
95-57-8	2-Chlorophenol	ND	8.0	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	16	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	16	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	16	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	16	mg/kg	
95-48-7	2-Methylphenol	ND	16	mg/kg	
	3&4-Methylphenol	ND	16	mg/kg	
88-75-5	2-Nitrophenol	ND	16	mg/kg	
100-02-7	4-Nitrophenol	ND	16	mg/kg	
87-86-5	Pentachlorophenol	ND	16	mg/kg	
108-95-2	Phenol	ND	8.0	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	16	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	16	mg/kg	
83-32-9	Acenaphthene	ND	3.2	mg/kg	
208-96-8	Acenaphthylene	ND	3.2	mg/kg	
98-86-2	Acetophenone	ND	16	mg/kg	
62-53-3	Aniline	ND	16	mg/kg	
120-12-7	Anthracene	5.36	3.2	mg/kg	
56-55-3	Benzo(a)anthracene	14.9	3.2	mg/kg	
50-32-8	Benzo(a)pyrene	13.8	8.0	mg/kg	
205-99-2	Benzo(b)fluoranthene	11.7	3.2	mg/kg	
191-24-2	Benzo(g,h,i)perylene	9.17	3.2	mg/kg	
207-08-9	Benzo(k)fluoranthene	10.9	3.2	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	8.0	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	8.0	mg/kg	
91-58-7	2-Chloronaphthalene	ND	8.0	mg/kg	
106-47-8	4-Chloroaniline	ND	16	mg/kg	
218-01-9	Chrysene	13.8	3.2	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	8.0	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	8.0	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	8.0	mg/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

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VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		65-141%
2037-26-5	Toluene-D8	102%		65-129%
460-00-4	4-Bromofluorobenzene	96%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8270D	SW846 3546	
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
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- (a) Elevated RL due to dilution required for matrix interference.
(b) Outside control limits due to matrix interference compounded by dilution.

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ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8270D	SW846 3546	
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

ABN MCP List

CAS No.	Compound	Result	RL	Units	Q
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95-50-1	1,2-Dichlorobenzene	ND	8.0	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	8.0	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	8.0	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	8.0	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	16	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	16	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	16	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	3.51	3.2	mg/kg	
132-64-9	Dibenzofuran	ND	3.2	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	8.0	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	8.0	mg/kg	
84-66-2	Diethyl phthalate	ND	8.0	mg/kg	
131-11-3	Dimethyl phthalate	ND	8.0	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	8.0	mg/kg	
206-44-0	Fluoranthene	33.8	3.2	mg/kg	
86-73-7	Fluorene	ND	3.2	mg/kg	
118-74-1	Hexachlorobenzene	ND	8.0	mg/kg	
87-68-3	Hexachlorobutadiene	ND	8.0	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	16	mg/kg	
67-72-1	Hexachloroethane	ND	8.0	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	9.55	8.0	mg/kg	
78-59-1	Isophorone	ND	8.0	mg/kg	
91-57-6	2-Methylnaphthalene	59.4	3.2	mg/kg	
91-20-3	Naphthalene	46.3	3.2	mg/kg	
98-95-3	Nitrobenzene	ND	8.0	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	8.0	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	8.0	mg/kg	
85-01-8	Phenanthrene	18.9	3.2	mg/kg	
129-00-0	Pyrene	28.0	3.2	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	8.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		25-109%
4165-62-2	Phenol-d5	79%		29-113%
118-79-6	2,4,6-Tribromophenol	163% ^b		20-141%
4165-60-0	Nitrobenzene-d5	0% ^b		27-115%
321-60-8	2-Fluorobiphenyl	82%		34-118%
1718-51-0	Terphenyl-d14	83%		42-139%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8082A SW846 3546		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK60925.D	1	08/20/16	AP	OP48455	GBK1914
Run #2						

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

MA Polychlorinated Biphenyls MCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.035	mg/kg	
11104-28-2	Aroclor 1221	ND	0.035	mg/kg	
11141-16-5	Aroclor 1232	ND	0.035	mg/kg	
53469-21-9	Aroclor 1242	ND	0.035	mg/kg	
12672-29-6	Aroclor 1248	ND	0.035	mg/kg	
11097-69-1	Aroclor 1254	ND	0.035	mg/kg	
11096-82-5	Aroclor 1260	0.101	0.035	mg/kg	
37324-23-5	Aroclor 1262	ND	0.035	mg/kg	
11100-14-4	Aroclor 1268	ND	0.035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		25-145%
877-09-8	Tetrachloro-m-xylene	53%		25-145%
2051-24-3	Decachlorobiphenyl	58%		25-179%
2051-24-3	Decachlorobiphenyl	46%		25-179%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	MADEP VPH REV 1.1		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB94991.D	1	08/18/16	DF	n/a	GAB5243
Run #2						

Initial Weight	Final Volume	Methanol Aliquot
Run #1	15.3 g	100 ul
Run #2		

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	0.434	0.31	mg/kg	
100-41-4	Ethylbenzene	13.6	0.31	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.063	mg/kg	
91-20-3	Naphthalene	23.3	0.31	mg/kg	
108-88-3	Toluene	11.0	0.31	mg/kg	
	m,p-Xylene	39.4	0.31	mg/kg	
95-47-6	o-Xylene	23.7	0.31	mg/kg	
	C5- C8 Aliphatics (Unadj.)	130	6.3	mg/kg	
	C9- C12 Aliphatics (Unadj.)	1040	6.3	mg/kg	
	C5- C10 Aromatics (Unadj.)	566	6.3	mg/kg	
	C5- C8 Aliphatics	118	6.3	mg/kg	
	C9- C12 Aliphatics	398	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	78%		70-130%
	2,3,4-Trifluorotoluene	83%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 0.88	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Arsenic	12.0	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Barium	100	4.4	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Beryllium	0.55	0.35	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Cadmium	0.74	0.35	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Chromium	22.6	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Lead	350	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Mercury	< 0.032	0.032	mg/kg	1	08/19/16	08/22/16	EAL	SW846 7471B 5
Nickel	16.1	3.5	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Selenium	< 0.88	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Silver a	< 0.88	0.88	mg/kg	2	08/18/16	08/22/16	EAL	SW846 6010C 3
Thallium	< 0.88	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Vanadium	32.8	0.88	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4
Zinc	186	1.8	mg/kg	1	08/18/16	08/19/16	EAL	SW846 3050B 4

- (1) Instrument QC Batch: MA19397
(2) Instrument QC Batch: MA19398
(3) Instrument QC Batch: MA19399
(4) Prep QC Batch: MP26648
(5) Prep QC Batch: MP26651

(a) Elevated RL due to dilution required for matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	MADEP EPH REV 1.1	SW846 3546	
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15285.D	1	TA	08/17/16	OP48449	GDE853
Run #2	DE15302.D	5	TA	08/17/16	OP48449	GDE854

Initial Weight	Final Volume
Run #1	11.1 g
Run #2	11.1 g

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	2.55	0.50	mg/kg	
208-96-8	Acenaphthylene	ND	0.50	mg/kg	
120-12-7	Anthracene	0.903	0.50	mg/kg	
56-55-3	Benzo(a)anthracene	3.28	0.50	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.50	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.50	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.50	mg/kg	
218-01-9	Chrysene	3.29	0.50	mg/kg	
53-70-3	Dibenz(a,h)anthracene	ND	0.50	mg/kg	
206-44-0	Fluoranthene	5.28	0.50	mg/kg	
86-73-7	Fluorene	2.78	0.50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.50	mg/kg	
91-57-6	2-Methylnaphthalene	41.4 a	2.5	mg/kg	
91-20-3	Naphthalene	24.1	0.50	mg/kg	
85-01-8	Phenanthrene	4.55	0.50	mg/kg	
129-00-0	Pyrene	4.59	0.50	mg/kg	
	C11-C22 Aromatics (Unadj.)	2440 a	99	mg/kg	
	C9-C18 Aliphatics	1390	9.9	mg/kg	
	C19-C36 Aliphatics	5850	20	mg/kg	
	C11-C22 Aromatics	2350	20	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	132%	134%	40-140%
321-60-8	2-Fluorobiphenyl	90%	81%	40-140%
580-13-2	2-Bromonaphthalene	66%	53%	40-140%
3386-33-2	1-Chlorooctadecane	250% b	88%	40-140%

- (a) Result is from Run# 2
(b) Outside control limits due to possible matrix interference.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Section 5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- MCP Form
- EPH Form
- VPH Form
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide Reactivity	< 1.6	1.6	mg/kg	1	08/19/16 17:49	CF	SW846 CHAP7
Ignitability (Flashpoint)	> 230		Deg. F	1	08/17/16	BF	SW846 1020
Solids, Percent	90.9		%	1	08/17/16	CF	SM 2540G-97 MOD
Specific Conductivity	260	0.50	umhos/cm	1	08/22/16	CF	EPA 120.1M
Sulfide Reactivity	< 54	54	mg/kg	1	08/18/16	BF	SW846 CHAP7
pH	7.8		su	1	08/17/16 15:45	EL	SW846 9045D

RL = Reporting Limit

SGS Accutest Sample Receipt Summary

Job Number MC47325 Client: ENVIOTRAC Project: MAGGIORE SOMMERVILLE
Date / Time Received: 8/16/2016 4:24:00 PM Delivery Method: SGS Courier Airbill #s:
Cooler Temps (Initial/Adjusted): #1:(2/6/2/6)

Cooler Security Y or N
1. Custody Seals Present: ☐ Y ☒ N
2. Custody Seals Intact: ☐ Y ☒ N
3. COC Present: ☒ Y ☐ N
4. Smpl Dates/Time OK: ☒ Y ☐ N

Cooler Temperature Y or N
1. Temp criteria achieved: ☒ Y ☐ N
2. Thermometer ID: IRGUN1
3. Cooler media: Ice (Bag)
4. No Coolers: 1

Sample Integrity - Documentation
1. Sample labels present on bottles: ☒ Y ☐ N
2. Container labeling complete: ☒ Y ☐ N
3. Sample container label / COC agree: ☒ Y ☐ N

Sample Integrity - Condition
1. Sample rec'd within HT: ☒ Y ☐ N
2. All containers accounted for: ☒ Y ☐ N
3. Condition of sample: Intact

Sample Integrity - Instructions
1. Analysis requested is clear: ☒ Y ☐ N
2. Bottles received for unspecified tests: ☐ Y ☒ N
3. Sufficient volume received for analysis: ☒ Y ☐ N
4. Compositing instructions clear: ☐ Y ☒ N
5. Filling instructions clear: ☐ Y ☒ N

Comments:

SGS ACCUTEST CHAIN OF CUSTODY

SGS Accutest of New England
85 Springfield Street, Suite 200, North Attleboro, MA 01762
TEL: 508-481-1200 FAX: 508-481-7133
www.sgsaccutest.com

SGS Accutest of New England
85 Springfield Street, Suite 200, North Attleboro, MA 01762
TEL: 508-481-1200 FAX: 508-481-7133
www.sgsaccutest.com

Project Information
Project Name: Maggiore Somerville
Site: 343-351 Sumner St.
City: Somerville, MA
State: MA
Zip: 02108
Project Manager: Chris Blake
Client POB: (781) 793-0074
Project #

Sample Information
Sample ID: S-1
Field ID / Point of Collection: S-1
Date / Time: 8/12/16 11:15
Operator: PM 50
Detection: 11:15
11:45
12:00
12:30
12:35
1:00
1:15
2:00
2:10
Stackpile
Tank Contents

Number of Samples Collected
Sample ID: S-1
Field ID / Point of Collection: S-1
Date / Time: 8/12/16 11:15
Operator: PM 50
Detection: 11:15
11:45
12:00
12:30
12:35
1:00
1:15
2:00
2:10
Stackpile
Tank Contents

Initial Assessment
1. Sample received within HT: ☒ Y ☐ N
2. All containers accounted for: ☒ Y ☐ N
3. Condition of sample: Intact
4. Analysis requested is clear: ☒ Y ☐ N
5. Bottles received for unspecified tests: ☐ Y ☒ N
6. Sufficient volume received for analysis: ☒ Y ☐ N
7. Compositing instructions clear: ☐ Y ☒ N
8. Filling instructions clear: ☐ Y ☒ N

Label Verification
1. Sample received within HT: ☒ Y ☐ N
2. All containers accounted for: ☒ Y ☐ N
3. Condition of sample: Intact
4. Analysis requested is clear: ☒ Y ☐ N
5. Bottles received for unspecified tests: ☐ Y ☒ N
6. Sufficient volume received for analysis: ☒ Y ☐ N
7. Compositing instructions clear: ☐ Y ☒ N
8. Filling instructions clear: ☐ Y ☒ N

SGS Accutest of New England
85 Springfield Street, Suite 200, North Attleboro, MA 01762
TEL: 508-481-1200 FAX: 508-481-7133
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MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative Temperature	N/A	pH <= 2	pH > 2	
Extraction Method	Received on Ice	Received at 4 Deg C	Other	Rec'd at 26 Deg C
Lab ID: MC47325-1				
Method for Ranges: MADEP EPH REV 1.1	Date Collected: 8/12/2016	First Date Run: 8/24/2016	Last Date Run: 8/16/2016	
Method for Targets: MADEP EPH REV 1.1	Date Extracted: 8/17/2016 3:00:00 PM	Low Dilution: 1	High Dilution: N/A	
EPH Surrogate Stds. Aromatic: o-Terphenyl	% Solids: 96.5			
EPH Fractionation Surrogate Standards: 2-Fluorobiphenyl				
	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		mg/kg	200 ^a	18
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	ND	0.44
Phenanthrene	85-01-8	mg/kg	6.73	0.44
Acenaphthene	83-32-9	mg/kg	0.618	0.44
Naphthalene	91-20-3	mg/kg	ND	0.44
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	ND	0.44
Anthracene	120-12-7	mg/kg	1.71	0.44
Benzo(a)anthracene	56-55-3	mg/kg	5.15	0.44
Benzo(a)pyrene	50-32-8	mg/kg	4.84	0.44
Benzo(b)fluoranthene	205-99-2	mg/kg	4.48	0.44
Benzo(g,h,i)perylene	191-24-2	mg/kg	2.86	0.44
Benzo(k)fluoranthene	207-08-9	mg/kg	3.88	0.44
Chrysene	218-01-9	mg/kg	5	0.44
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.957	0.44
Fluoranthene	206-44-0	mg/kg	10.5	0.44
Fluorene	86-73-7	mg/kg	0.712	0.44
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	2.86	0.44
Pyrene	129-00-0	mg/kg	7.92	0.44
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	ND ^a	8.8
C19-C36 Aliphatics		mg/kg	76.6 ^a	18
C11-C22 Aromatics		mg/kg	142 ^c	18
Surrogate Recoveries		%	Acceptance Range	
1-Chlorooctadecane		%	93	40-140 %
o-Terphenyl		%	132	40-140 %
2-Fluorobiphenyl		%	73	40-140 %
2-Bromonaphthalene		%	78	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes			
B	ND indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature: H. (Brad) Madadian Position: Laboratory Director
Printed Name: H. (Brad) Madadian Date: 8/25/2016



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM	Exhibit VII A
July 1, 2010	Revision No 1
Final	

Exhibit VII A-2. MassDEP Analytical Protocol Certification Form

5.2

5

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	MC47325
Project Location:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC47325-1, MC47325-2, MC47325-3, MC47325-4, MC47325-5, MC47325-6, MC47325-7, MC47325-8, MC47325-9

Matrices:	Groundwater/Surface Water ()	Soil/Sediment (X)	Drinking Water ()	Air ()	Other ()
CAM Protocol (check all that apply below)					
8260 VOC (X)	74707471 Hg (X)	MassDEP VPH (X)	8081 Pesticides ()	7196 Hex Cr ()	Mass DEP APH ()
CAM IIA	CAM III B	CAM IV A	CAM V B	CAM VI B	CAM IX A
8270 SVOC (X)	7010 Metals ()	MassDEP EPH (X)	8151 Herbicides ()	8330 Explosives ()	TO-15 VOC ()
CAM II B	CAM III C	CAM IV B	CAM V C	CAM VIII A	CAM IX B
6010 Metals (X)	6020 Metals ()	8082 PCB (X)	9014 Total ()	6860 Perchlorate ()	
CAM III A	CAM III D	CAM V A	Cyanide/PAC ()	CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A. "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
Responses to questions G, H, and I below is required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
I	Were results reported for the complete analyte list specified in the Selected CAM protocol(s)?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
All Negative responses must be addressed in an attached Environmental Laboratory case narrative.					
I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					

Signature: H. (Brad) Madadian Position: Laboratory Director
Printed Name: H. (Brad) Madadian Date: 25-Aug-16

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2 6 Deg C
Extraction Method	SW846 3546			
Method for Ranges	MADEP EPH REV 1.1	Client ID: S-3	Date Collected: 8/12/2016	Lab ID: MC47325-3
Method for Targets	MADEP EPH REV 1.1	Date Extracted: 8/17/2016 3:00:00 PM	First Date Run: 8/23/2016	Last Date Run: 09/24/16
EPH Surrogate Sds	Alphatic: 1-Chlorooctadecane	% Solids: 94	Low Dilution: 1	High Dilution: 5
EPH Fractionation	Aromatic: o-Terphenyl			
Surrogate Standards	2-Fluorobiphenyl			
Surrogate Standards	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units mg/kg	Result	RDL
C11-C22 Aromatics (Unadj.)			950 ^A	94
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	ND	0.47
Phenanthrene	85-01-8	mg/kg	44.5	2.4
Acenaphthene	83-32-9	mg/kg	1.73	0.47
Naphthalene	91-20-3	mg/kg	ND	0.47
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	2.45	0.47
Anthracene	120-12-7	mg/kg	11.9	0.47
Benzo(a)anthracene	56-55-3	mg/kg	28.1	0.47
Benzo(a)pyrene	50-32-8	mg/kg	19.2	0.47
Benzo(b)fluoranthene	205-99-2	mg/kg	28.2	0.47
Benzo(g,h,i)perylene	191-24-2	mg/kg	9.59	0.47
Benzo(k)fluoranthene	207-08-9	mg/kg	10.8	0.47
Chrysene	218-01-9	mg/kg	23.6	0.47
Dibenz(a,h)anthracene	53-70-3	mg/kg	3.81	0.47
Fluoranthene	206-44-0	mg/kg	55.7	2.4
Fluorene	86-73-7	mg/kg	4.67	0.47
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	11.4	0.47
Pyrene	129-00-0	mg/kg	39.2	2.4
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	11.7 ^A	9.4
C19-C36 Aliphatics		mg/kg	95.3 ^A	19
C11-C22 Aromatics		mg/kg	655 ^C	19
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane		%	68	40-140 %
1-Chlorooctadecane		%	87	40-140 %
o-Terphenyl		%	211 ^A	40-140 %
o-Terphenyl		%	225 ^A	40-140 %
2-Fluorobiphenyl		%	79	40-140 %
2-Fluorobiphenyl		%	90	40-140 %
2-Bromonaphthalene		%	60	40-140 %
2-Bromonaphthalene		%	77	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons			
E	Exclude the concentration of Target PAH Analytes			
Z	A-J qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☐ Yes ☒ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature  Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2 6 Deg C
Extraction Method	SW846 3546			
Method for Ranges	MADEP EPH REV 1.1	Client ID: S-2	Date Collected: 8/12/2016	Lab ID: MC47325-2
Method for Targets	MADEP EPH REV 1.1	Date Extracted: 8/17/2016 3:00:00 PM	First Date Run: 8/23/2016	Last Date Run: N/A
EPH Surrogate Sds	Alphatic: 1-Chlorooctadecane	% Solids: 95.6	Low Dilution: 1	High Dilution: N/A
EPH Fractionation	Aromatic: o-Terphenyl			
Surrogate Standards	2-Fluorobiphenyl			
Surrogate Standards	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units mg/kg	Result	RDL
C11-C22 Aromatics (Unadj.)			ND ^A	19
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	ND	0.47
Phenanthrene	85-01-8	mg/kg	ND	0.47
Acenaphthene	83-32-9	mg/kg	ND	0.47
Naphthalene	91-20-3	mg/kg	ND	0.47
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	ND	0.47
Anthracene	120-12-7	mg/kg	ND	0.47
Benzo(a)anthracene	56-55-3	mg/kg	ND	0.47
Benzo(a)pyrene	50-32-8	mg/kg	ND	0.47
Benzo(b)fluoranthene	205-99-2	mg/kg	ND	0.47
Benzo(g,h,i)perylene	191-24-2	mg/kg	ND	0.47
Benzo(k)fluoranthene	207-08-9	mg/kg	ND	0.47
Chrysene	218-01-9	mg/kg	ND	0.47
Dibenz(a,h)anthracene	53-70-3	mg/kg	ND	0.47
Fluoranthene	206-44-0	mg/kg	ND	0.47
Fluorene	86-73-7	mg/kg	ND	0.47
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND	0.47
Pyrene	129-00-0	mg/kg	ND	0.47
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	ND ^A	9.5
C19-C36 Aliphatics		mg/kg	ND ^A	19
C11-C22 Aromatics		mg/kg	ND ^C	19
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane		%	101	40-140 %
o-Terphenyl		%	84	40-140 %
2-Fluorobiphenyl		%	82	40-140 %
2-Bromonaphthalene		%	78	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons			
E	Exclude the concentration of Target PAH Analytes			
Z	A-J qualifier indicates an estimated value			

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Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

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Signature  Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg C	Other	Rec'd at 2.6 Deg C
Extraction Method	SW846 3546			
Method for Ranges	MADEP EPH REV 1.1	Client ID: S-5	Lab ID: MC47325-5	
Method for Targets	MADEP EPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
EPH Surrogate Sids	Aliphatic: 1-Chlorooctadecane	Date Extracted: 8/17/2016 3 00 00 PM	First Date Run: 8/23/2016	Last Date Run: N/A
EPH Fractionation	Aromatic: o-Terphenyl	% Solids: 96.2	Low Dilution: 1	High Dilution: N/A
Surrogate Standards	2-Fluorobiphenyl			
	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units mg/kg	Result	RDL
C11-C22 Aromatics (Unadj)			230 ^A	18
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	ND	0.45
Phenanthrene	85-01-8	mg/kg	9.08	0.45
Acenaphthene	83-32-9	mg/kg	0.682	0.45
Naphthalene	91-20-3	mg/kg	ND	0.45
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	ND	0.45
Anthracene	120-12-7	mg/kg	1.94	0.45
Benzo(a)anthracene	56-55-3	mg/kg	6.18	0.45
Benzo(a)pyrene	50-32-8	mg/kg	5.53	0.45
Benzo(b)fluoranthene	205-99-2	mg/kg	5.89	0.45
Benzo(g,h,i)perylene	191-24-2	mg/kg	3.41	0.45
Benzo(k)fluoranthene	207-08-9	mg/kg	2.91	0.45
Chrysene	218-01-9	mg/kg	5.49	0.45
Dibenz(a,h)anthracene	53-70-3	mg/kg	1.15	0.45
Fluoranthene	206-44-0	mg/kg	12.5	0.45
Fluorene	86-73-7	mg/kg	0.794	0.45
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	3.35	0.45
Pyrene	129-00-0	mg/kg	9.47	0.45
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	ND ^A	9.1
C19-C36 Aliphatics		mg/kg	64.9 ^A	18
C11-C22 Aromatics		mg/kg	161 ^C	18
Surrogate Recoveries				
1-Chlorooctadecane		%	88	40-140 %
o-Terphenyl		%	122	40-140 %
2-Fluorobiphenyl		%	81	40-140 %
2-Bromonaphthalene		%	90	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes			
Z	A, J qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed?

Were all performance/acceptance standards for required QA/QC procedures achieved?

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature

Printed Name

H. (Brad) Madadian

Position

Date

8/25/2016

Laboratory Director

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg C	Other	Rec'd at 2.6 Deg C
Extraction Method	SW846 3546			
Method for Ranges	MADEP EPH REV 1.1	Client ID: S-4	Lab ID: MC47325-4	
Method for Targets	MADEP EPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
EPH Surrogate Sids	Aliphatic: 1-Chlorooctadecane	Date Extracted: 8/17/2016 3 00 00 PM	First Date Run: 8/23/2016	Last Date Run: N/A
EPH Fractionation	Aromatic: o-Terphenyl	% Solids: 97.9	Low Dilution: 1	High Dilution: N/A
Surrogate Standards	2-Fluorobiphenyl			
	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units mg/kg	Result	RDL
C11-C22 Aromatics (Unadj)			ND ^A	18
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	ND	0.44
Phenanthrene	85-01-8	mg/kg	ND	0.44
Acenaphthene	83-32-9	mg/kg	ND	0.44
Naphthalene	91-20-3	mg/kg	ND	0.44
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	ND	0.44
Anthracene	120-12-7	mg/kg	ND	0.44
Benzo(a)anthracene	56-55-3	mg/kg	ND	0.44
Benzo(a)pyrene	50-32-8	mg/kg	ND	0.44
Benzo(b)fluoranthene	205-99-2	mg/kg	ND	0.44
Benzo(g,h,i)perylene	191-24-2	mg/kg	ND	0.44
Benzo(k)fluoranthene	207-08-9	mg/kg	ND	0.44
Chrysene	218-01-9	mg/kg	ND	0.44
Dibenz(a,h)anthracene	53-70-3	mg/kg	ND	0.44
Fluoranthene	206-44-0	mg/kg	ND	0.44
Fluorene	86-73-7	mg/kg	ND	0.44
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND	0.44
Pyrene	129-00-0	mg/kg	ND	0.44
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	ND ^A	8.9
C19-C36 Aliphatics		mg/kg	ND ^A	18
C11-C22 Aromatics		mg/kg	ND ^C	18
Surrogate Recoveries				
1-Chlorooctadecane		%	95	40-140 %
o-Terphenyl		%	84	40-140 %
2-Fluorobiphenyl		%	78	40-140 %
2-Bromonaphthalene		%	87	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes			
Z	A, J qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed?

Were all performance/acceptance standards for required QA/QC procedures achieved?

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature

Printed Name

H. (Brad) Madadian

Position

Date

8/25/2016

Laboratory Director

MADEP EPH FORM

Matrix	Aqueous	Soil	Leaking	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Extraction Method	SW846 3546			
Method for Ranges:		Client ID: S-7		
Method for Targets:		Date Collected: 8/12/2016		
EPH Surrogate Sids:		Date Extracted: 8/24/2016		
Aromatic: o-Terphenyl		First Date Run: 8/24/2016		
2-Fluorobiphenyl		Last Date Run: N/A		
2-Bromonaphthalene		High Dilution: N/A		
Low Dilution: 1				
% Solids: 94.4				
Unadjusted Ranges		CAS #	Units	Result
C11-C22 Aromatics (Unadj.)			mg/kg	172 ^a
Diesel PAH Analytes				
2-Methylnaphthalene		91-57-6	mg/kg	ND
Phenanthrene		85-01-8	mg/kg	ND
Acenaphthene		83-32-9	mg/kg	ND
Naphthalene		91-20-3	mg/kg	ND
Other Target PAH Analytes				
Acenaphthylene		208-96-8	mg/kg	ND
Anthracene		120-12-7	mg/kg	ND
Benzo(a)anthracene		56-55-3	mg/kg	ND
Benzo(a)pyrene		50-32-8	mg/kg	ND
Benzo(b)fluoranthene		205-99-2	mg/kg	ND
Benzo(g,h,i)perylene		191-24-2	mg/kg	ND
Benzo(k)fluoranthene		207-08-9	mg/kg	ND
Chrysene		218-01-9	mg/kg	ND
Dibenz(a,h)anthracene		53-70-3	mg/kg	ND
Fluoranthene		206-44-0	mg/kg	ND
Fluorene		86-73-7	mg/kg	ND
Indeno(1,2,3-cd)pyrene		193-39-5	mg/kg	ND
Pyrene		129-00-0	mg/kg	ND
Adjusted Ranges				
C9-C18 Aliphatics			mg/kg	10.3 ^a
C19-C36 Aliphatics			mg/kg	380 ^a
C11-C22 Aromatics			mg/kg	171 ^c
Surrogate Recoveries			%	Acceptance Range
1-Chlorooctadecane			%	80
o-Terphenyl			%	82
2-Fluorobiphenyl			%	84
2-Bromonaphthalene			%	95
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
E Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
F Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
G Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
H Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
I Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
J Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
K Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
L Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
M Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
N Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
O Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
P Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
Q Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
R Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
S Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
T Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
U Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
V Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
W Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
X Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
Y Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
Z Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP EPH FORM

Matrix	Aqueous	Soil	Leaking	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Extraction Method	SW846 3546			
Method for Ranges:		Client ID: S-6		
Method for Targets:		Date Collected: 8/12/2016		
EPH Surrogate Sids:		Date Extracted: 8/24/2016		
Aromatic: o-Terphenyl		First Date Run: N/A		
2-Fluorobiphenyl		Last Date Run: N/A		
2-Bromonaphthalene		High Dilution: N/A		
Low Dilution: 1				
% Solids: 96				
Unadjusted Ranges		CAS #	Units	Result
C11-C22 Aromatics (Unadj.)			mg/kg	296 ^a
Diesel PAH Analytes				
2-Methylnaphthalene		91-57-6	mg/kg	ND
Phenanthrene		85-01-8	mg/kg	ND
Acenaphthene		83-32-9	mg/kg	ND
Naphthalene		91-20-3	mg/kg	ND
Other Target PAH Analytes				
Acenaphthylene		208-96-8	mg/kg	ND
Anthracene		120-12-7	mg/kg	ND
Benzo(a)anthracene		56-55-3	mg/kg	ND
Benzo(a)pyrene		50-32-8	mg/kg	ND
Benzo(b)fluoranthene		205-99-2	mg/kg	ND
Benzo(g,h,i)perylene		191-24-2	mg/kg	ND
Benzo(k)fluoranthene		207-08-9	mg/kg	ND
Chrysene		218-01-9	mg/kg	ND
Dibenz(a,h)anthracene		53-70-3	mg/kg	ND
Fluoranthene		206-44-0	mg/kg	ND
Fluorene		86-73-7	mg/kg	ND
Indeno(1,2,3-cd)pyrene		193-39-5	mg/kg	ND
Pyrene		129-00-0	mg/kg	ND
Adjusted Ranges				
C9-C18 Aliphatics			mg/kg	13.4 ^a
C19-C36 Aliphatics			mg/kg	488 ^a
C11-C22 Aromatics			mg/kg	294 ^c
Surrogate Recoveries			%	Acceptance Range
1-Chlorooctadecane			%	65
o-Terphenyl			%	82
2-Fluorobiphenyl			%	94
2-Bromonaphthalene			%	110
Footnotes				
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
E Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
F Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
G Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
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N Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
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P Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
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T Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
U Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
V Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
W Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
X Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
Y Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				
Z Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards ending in that range				

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the EPH method, as specified in Sect 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Extraction Method	SW846 3546			
Method for Ranges:	Client ID: STOCKPILE			
Method for Targets:	Date Collected: 8/12/2016			
EPH Surrogate Sids	Date Extracted: 8/17/2016 3:00:00 PM			
EPH Fractionation	First Date Run: 8/24/2016			
Surrogate Standards:	Low Dilution: 1			
	High Dilution: 5			
	% Solids: 90.9			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		mg/kg	2440 ^A	99
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	41.4	2.5
Phenanthrene	85-01-8	mg/kg	4.55	0.5
Acenaphthene	83-32-9	mg/kg	2.55	0.5
Naphthalene	91-20-3	mg/kg	24.1	0.5
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	ND	0.5
Anthracene	120-12-7	mg/kg	0.903	0.5
Benzo(a)anthracene	56-55-3	mg/kg	3.28	0.5
Benzo(a)pyrene	50-32-8	mg/kg	ND	0.5
Benzo(b)fluoranthene	205-99-2	mg/kg	ND	0.5
Benzo(g,h,i)perylene	191-24-2	mg/kg	ND	0.5
Benzo(k)fluoranthene	207-08-9	mg/kg	ND	0.5
Chrysene	218-01-9	mg/kg	3.29	0.5
Dibenz(a,h)anthracene	53-70-3	mg/kg	ND	0.5
Fluoranthene	206-44-0	mg/kg	5.28	0.5
Fluorene	86-73-7	mg/kg	2.78	0.5
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND	0.5
Pyrene	129-00-0	mg/kg	4.59	0.5
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	1390 ^A	9.9
C19-C36 Aliphatics		mg/kg	5850 ^A	20
C11-C22 Aromatics		mg/kg	2350 ^C	20
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane		%	88	40-140 %
1-Chlorooctadecane		%	250 ^F	40-140 %
o-Terphenyl		%	134	40-140 %
o-Terphenyl		%	132	40-140 %
2-Fluorobiphenyl		%	81	40-140 %
2-Fluorobiphenyl		%	90	40-140 %
2-Bromonaphthalene		%	53	40-140 %
2-Bromonaphthalene		%	66	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
F	Outside control limits due to possible matrix interference			
Z	A "Z" qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed?

Were all performance/acceptance standards for required QA/QC procedures achieved?

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature

Printed Name

H. (Brad) Madadian

Position

Laboratory Director

Date

8/25/2016

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Extraction Method	SW846 3546			
Method for Ranges:	Client ID: S-8			
Method for Targets:	Date Collected: 8/12/2016			
EPH Surrogate Sids	Date Extracted: 8/17/2016 3:00:00 PM			
EPH Fractionation	First Date Run: 8/24/2016			
Surrogate Standards:	Low Dilution: 1			
	High Dilution: N/A			
	% Solids: 94.2			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		mg/kg	136 ^A	19
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	mg/kg	ND	0.47
Phenanthrene	85-01-8	mg/kg	0.779	0.47
Acenaphthene	83-32-9	mg/kg	ND	0.47
Naphthalene	91-20-3	mg/kg	ND	0.47
Other Target PAH Analytes				
Acenaphthylene	208-96-8	mg/kg	ND	0.47
Anthracene	120-12-7	mg/kg	ND	0.47
Benzo(a)anthracene	56-55-3	mg/kg	0.676	0.47
Benzo(a)pyrene	50-32-8	mg/kg	0.929	0.47
Benzo(b)fluoranthene	205-99-2	mg/kg	0.57	0.47
Benzo(g,h,i)perylene	191-24-2	mg/kg	0.791	0.47
Benzo(k)fluoranthene	207-08-9	mg/kg	0.574	0.47
Chrysene	218-01-9	mg/kg	0.696	0.47
Dibenz(a,h)anthracene	53-70-3	mg/kg	ND	0.47
Fluoranthene	206-44-0	mg/kg	1.42	0.47
Fluorene	86-73-7	mg/kg	ND	0.47
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND	0.47
Pyrene	129-00-0	mg/kg	1.1	0.47
Adjusted Ranges				
C9-C18 Aliphatics		mg/kg	ND ^A	9.4
C19-C36 Aliphatics		mg/kg	226 ^A	19
C11-C22 Aromatics		mg/kg	128 ^C	19
Surrogate Recoveries			Acceptance Range	
1-Chlorooctadecane		%	83	40-140 %
o-Terphenyl		%	90	40-140 %
2-Fluorobiphenyl		%	81	40-140 %
2-Bromonaphthalene		%	84	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
Z	A "Z" qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed?

Were all performance/acceptance standards for required QA/QC procedures achieved?

Were any significant modifications made to the EPH method, as specified in Sect. 11.3?

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature

Printed Name

H. (Brad) Madadian

Position

Date

8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 26 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil 1.1 +/- 25%)		
Method for Ranges	MADEP VPH REV 1.1	Client ID: S-2	Lab ID: MC47325-2	
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
VPH Surrogate Standard's		Date Extracted: N/A	First Date Run: 8/18/2016	Last Date Run: N/A
PID:		% Solids: 95.6	Low Dilution: 1	High Dilution: N/A
FID:				

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	5.4	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	5.4	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	mg/kg	ND ^a	5.4	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.27	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.27	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.064	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.27	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.27	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.27	
m,p-Xylene		C9-C12	mg/kg	ND	0.27	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.4	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.4	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 77 70-130 %
PID 2,3,4-Trifluorotoluene	% 75 70-130 %

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 26 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil 1.1 +/- 25%)		
Method for Ranges	MADEP VPH REV 1.1	Client ID: S-1	Lab ID: MC47325-1	
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
VPH Surrogate Standard's		Date Extracted: N/A	First Date Run: 8/18/2016	Last Date Run: N/A
PID:		% Solids: 96.5	Low Dilution: 1	High Dilution: N/A
FID:				

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	5.7	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	5.7	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	mg/kg	ND ^a	5.7	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.28	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.28	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.057	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.28	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.28	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.28	
m,p-Xylene		C9-C12	mg/kg	ND	0.28	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.7	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.7	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 76 70-130 %
PID 2,3,4-Trifluorotoluene	% 74 70-130 %

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil 1.1 +/- 25%)		

Method for Ranges:	MADEP VPH REV 1.1	Client ID: S-4	Lab ID: MC47325-4
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016
VPH Surrogate Standards		Date Extracted: N/A	First Date Run: 8/18/2016
PID:		% Solids: 97.9	Last Date Run: N/A
FID:		Low Dilution: 1	High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	5.1	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	5.1	
C9- C12 Aliphatics (Unadj.)	1634-04-4	N/A	mg/kg	ND ^a	5.1	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.26	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.26	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.051	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.26	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.26	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.26	
m,p-Xylene		C9-C12	mg/kg	ND	0.26	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.1	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.1	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene			%	73	70-130 %
PID 2,3,4-Trifluorotoluene			%	71	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

C A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature  Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil 1.1 +/- 25%)		

Method for Ranges:	MADEP VPH REV 1.1	Client ID: S-3	Lab ID: MC47325-3
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016
VPH Surrogate Standards		Date Extracted: N/A	First Date Run: 8/18/2016
PID:		% Solids: 94	Last Date Run: N/A
FID:		Low Dilution: 1	High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	mg/kg	ND ^a	5	
C9- C10 Aromatics (Unadj.)		N/A	mg/kg	ND ^a	5	
C9- C12 Aliphatics (Unadj.)		N/A	mg/kg	ND ^a	5	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.25	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.25	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.05	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.25	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.25	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.25	
m,p-Xylene		C9-C12	mg/kg	ND	0.25	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene			%	76	70-130 %
PID 2,3,4-Trifluorotoluene			%	75	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

C A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature  Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	Rec'd at 2 6 Deg C
Temperature	Received on Ice	Received at 4 Deg C	Other	
Methanol	Methanol Covering Soil (mL Methanol/g soil 1.1 +/- 25%)	Lab ID: MC47325-6		
Method for Ranges:	MADEP VPH REV 1.1	Client ID: S-6	Date Received	8/16/2016
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected	8/12/2016	
VPH Surrogate Standards		Date Extracted:	N/A	First Date Run: 8/18/2016
PID:		% Solids:	96	N/A
FID:		Low Dilution:	1	High Dilution N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj)		N/A	mg/kg	ND*	5.8	
C9- C10 Aromatics (Unadj)		N/A	mg/kg	ND*	5.8	
C9- C12 Aliphatics (Unadj)		N/A	mg/kg	ND*	5.8	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.29	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.29	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.058	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.29	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.29	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.29	
m,p-Xylene		C9-C12	mg/kg	ND	0.29	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND*	5.8	
C9- C12 Aliphatics		N/A	mg/kg	ND*	5.8	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene	%	77	70-130 %		
PID 2,3,4-Trifluorotoluene	%	74	70-130 %		

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	Rec'd at 2 6 Deg C
Temperature	Received on Ice	Received at 4 Deg C	Other	
Methanol	Methanol Covering Soil (mL Methanol/g soil 1.1 +/- 25%)	Lab ID: MC47325-5		
Method for Ranges:	MADEP VPH REV 1.1	Client ID: S-5	Date Received	8/16/2016
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected	8/12/2016	
VPH Surrogate Standards		Date Extracted:	N/A	First Date Run: 8/18/2016
PID:		% Solids:	96.2	N/A
FID:		Low Dilution:	1	High Dilution N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj)		N/A	mg/kg	ND*	5.7	
C9- C10 Aromatics (Unadj)		N/A	mg/kg	ND*	5.7	
C9- C12 Aliphatics (Unadj)		N/A	mg/kg	ND*	5.7	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.29	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.29	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.057	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.29	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.29	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.29	
m,p-Xylene		C9-C12	mg/kg	ND	0.29	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND*	5.7	
C9- C12 Aliphatics		N/A	mg/kg	ND*	5.7	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene	%	79	70-130 %		
PID 2,3,4-Trifluorotoluene	%	77	70-130 %		

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil)	1.1 +/- 25%	
Method for Ranges:	MADEP VPH REV 1.1	Client ID: S-4	Lab ID: MC47325-4	
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
VPH Surrogate Standards		Date Extracted: N/A	First Date Run: 8/18/2016	Last Date Run: N/A
PID:		% Solids: 97.9	Low Dilution: 1	High Dilution: N/A
FID:				

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	5.1	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	5.1	
C9- C12 Aliphatics (Unadj.)	1634-04-4	N/A	mg/kg	ND ^a	5.1	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.26	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.26	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.051	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.26	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.26	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.26	
m,p-Xylene		C9-C12	mg/kg	ND	0.26	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.1	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.1	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene			%	73	70-130 %
PID 2,3,4-Trifluorotoluene			%	71	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil)	1.1 +/- 25%	
Method for Ranges:	MADEP VPH REV 1.1	Client ID: S-3	Lab ID: MC47325-3	
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
VPH Surrogate Standards		Date Extracted: N/A	First Date Run: 8/18/2016	Last Date Run: N/A
PID:		% Solids: 94	Low Dilution: 1	High Dilution: N/A
FID:				

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	5	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	5	
C9- C12 Aliphatics (Unadj.)	1634-04-4	N/A	mg/kg	ND ^a	5	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.25	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.25	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.05	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.25	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.25	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.25	
m,p-Xylene		C9-C12	mg/kg	ND	0.25	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene			%	76	70-130 %
PID 2,3,4-Trifluorotoluene			%	75	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons

Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	Rec'd at 26 Deg C
Temperature	Received on Ice	Received at 4 Deg C	Other	
Methanol	Methanol Covering Soil (mL Methanol/g soil, 1.1 +/- 25%)			
Method for Ranges, Method for Target Analytes, VPH Surrogate Standards	MADEP VPH REV 1.1 MADEP VPH REV 1.1	Client ID: S-6 Date Collected: 8/12/2016	Lab ID: MC47325-6 Date Received: 8/16/2016	
PID	Date Extracted:	First Date Run:	Last Date Run:	
FID	% Solids:	Low Dilution:	High Dilution:	

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	mg/kg	ND ^a	5.8	
C9- C10 Aromatics (Unadj.)		N/A	mg/kg	ND ^a	5.8	
C9- C12 Aliphatics (Unadj.)		N/A	mg/kg	ND ^a	5.8	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.29	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.29	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.058	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.29	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.29	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.29	
m,p-Xylene		C9-C12	mg/kg	ND	0.29	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.8	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.8	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 77 70-130 %
PID 2,3,4-Trifluorotoluene	% 74 70-130 %
Footnotes	
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
E Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
F Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
G Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
H Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
I Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
J Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
K Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
L Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
M Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
N Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
O Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
P Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
Q Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
R Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
S Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
T Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
U Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
V Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
W Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
X Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
Y Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
Z A "J" qualifier indicates an estimated value	

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. Brad Madadian Postition Laboratory Director

Printed Name H (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	Rec'd at 26 Deg C
Temperature	Received on Ice	Received at 4 Deg C	Other	
Methanol	Methanol Covering Soil (mL Methanol/g soil, 1.1 +/- 25%)			
Method for Ranges, Method for Target Analytes, VPH Surrogate Standards	MADEP VPH REV 1.1 MADEP VPH REV 1.1	Client ID: S-5 Date Collected: 8/12/2016	Lab ID: MC47325-5 Date Received: 8/16/2016	
PID	Date Extracted:	First Date Run:	Last Date Run:	
FID	% Solids:	Low Dilution:	High Dilution:	

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	mg/kg	ND ^a	5.7	
C9- C10 Aromatics (Unadj.)		N/A	mg/kg	ND ^a	5.7	
C9- C12 Aliphatics (Unadj.)		N/A	mg/kg	ND ^a	5.7	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.29	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.29	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.057	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.29	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.29	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.29	
m,p-Xylene		C9-C12	mg/kg	ND	0.29	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.7	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.7	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 79 70-130 %
PID 2,3,4-Trifluorotoluene	% 77 70-130 %
Footnotes	
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
E Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
F Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
G Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
H Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
I Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
J Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
K Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
L Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
M Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
N Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
O Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
P Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
Q Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
R Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
S Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
T Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
U Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
V Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
W Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
X Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
Y Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons
Z A "J" qualifier indicates an estimated value	

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. Brad Madadian Postition Laboratory Director

Printed Name H (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil: 1:1 +/- 25%)		
Method for Ranges: MADEP VPH REV 1.1 Client ID: S-8 Lab ID: MC47325-8				
Method for Target Analytes: MADEP VPH REV 1.1 Date Collected: 8/12/2016 Date Received: 8/16/2016				
PID	Date Extracted: N/A		First Date Run: 8/18/2016	Last Date Run: N/A
FID	% Solids: 94.2		Low Dilution: 1	High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	5.2	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	5.2	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	mg/kg	ND ^a	5.2	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.26	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.26	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.052	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.26	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.26	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.26	
m,p-Xylene		C9-C12	mg/kg	ND	0.26	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	5.2	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	5.2	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 77 70-130 %
PID 2,3,4-Trifluorotoluene	% 74 70-130 %

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 aliphatic Hydrocarbons exclude the conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. Brad Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2.6 Deg. C
Methanol	Methanol Covering Soil	(mL Methanol/g soil: Other) NOTE: Ratio <0.75 to 1		
Method for Ranges: MADEP VPH REV 1.1 Client ID: S-7 Lab ID: MC47325-7				
Method for Target Analytes: MADEP VPH REV 1.1 Date Collected: 8/12/2016 Date Received: 8/16/2016				
PID	Date Extracted: N/A		First Date Run: 8/18/2016	Last Date Run: N/A
FID	% Solids: 94.4		Low Dilution: 1	High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	mg/kg	ND ^a	9.1	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	mg/kg	ND ^a	9.1	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	mg/kg	ND ^a	9.1	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	ND	0.46	
Toluene	108-88-3	C5-C8	mg/kg	ND	0.46	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.091	
Benzene	71-43-2	C5-C8	mg/kg	ND	0.46	
Naphthalene	91-20-3	N/A	mg/kg	ND	0.46	
o-Xylene	95-47-6	C9-C12	mg/kg	ND	0.46	
m,p-Xylene		C9-C12	mg/kg	ND	0.46	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	ND ^a	9.1	
C9- C12 Aliphatics		N/A	mg/kg	ND ^a	9.1	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 76 70-130 %
PID 2,3,4-Trifluorotoluene	% 73 70-130 %

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 aliphatic Hydrocarbons exclude the conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. Brad Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

Internal Sample Tracking Chronicle

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No:

MC47325

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC47325-1	Collected: 12-AUG-16 10:00	By: FM	Received: 16-AUG-16	By: NT		
S-1						
MC47325-1	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-1	MADEP VPH REV 1.1 18-AUG-16 12:47	DF				VMAVPH
MC47325-1	MADEP EPH REV 1.1 24-AUG-16 15:35	TA		17-AUG-16	NE	BMAEPH
MC47325-2	Collected: 12-AUG-16 11:15	By: FM	Received: 16-AUG-16	By: NT		
S-2						
MC47325-2	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-2	MADEP VPH REV 1.1 18-AUG-16 13:25	DF				VMAVPH
MC47325-2	MADEP EPH REV 1.1 23-AUG-16 22:14	TA		17-AUG-16	IC	BMAEPH
MC47325-3	Collected: 12-AUG-16 12:00	By: FM	Received: 16-AUG-16	By: NT		
S-3						
MC47325-3	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-3	MADEP VPH REV 1.1 18-AUG-16 14:04	DF				VMAVPH
MC47325-3	MADEP EPH REV 1.1 23-AUG-16 22:41	TA		17-AUG-16	IC	BMAEPH
MC47325-3	MADEP EPH REV 1.1 24-AUG-16 10:41	TA		17-AUG-16	IC	BMAEPH
MC47325-4	Collected: 12-AUG-16 11:00	By: FM	Received: 16-AUG-16	By: NT		
S-4						
MC47325-4	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-4	MADEP VPH REV 1.1 18-AUG-16 14:42	DF				VMAVPH
MC47325-4	MADEP EPH REV 1.1 23-AUG-16 23:09	TA		17-AUG-16	IC	BMAEPH
MC47325-5	Collected: 12-AUG-16 12:30	By: FM	Received: 16-AUG-16	By: NT		
S-5						
MC47325-5	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-5	MADEP VPH REV 1.1 18-AUG-16 15:21	DF				VMAVPH
MC47325-5	MADEP EPH REV 1.1 23-AUG-16 23:37	TA		17-AUG-16	IC	BMAEPH
MC47325-6	Collected: 12-AUG-16 12:35	By: FM	Received: 16-AUG-16	By: NT		
S-6						
MC47325-6	SM 2540G-97 MOD	17-AUG-16	CF			%SOL

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservatives	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 2 6 Deg. C
Methanol	Methanol Covering Soil (mL Methanol/g soil 1 1 +/- 25%)			
Method for Ranges:	MADEP VPH REV 1.1	Client ID: STOCKPILE	Lab ID: MC47325-9	
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/12/2016	Date Received: 8/16/2016	
VPH Surrogate Standards		Date Extracted:	First Date Run:	Last Date Run:
PID		N/A	8/18/2016	N/A
FID		% Solids: 90.9	Low Dilution: 1	High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	mg/kg	130 ^A	63	
C9- C10 Aromatics (Unadj.)		N/A	mg/kg	566 ^A	63	
C9- C12 Aliphatics (Unadj.)		N/A	mg/kg	1040 ^A	63	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	mg/kg	13.6	0.31	
Toluene	108-88-3	C5-C8	mg/kg	11	0.31	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	mg/kg	ND	0.063	
Benzene	71-43-2	C5-C8	mg/kg	0.434	0.31	
Naphthalene	91-20-3	N/A	mg/kg	23.3	0.31	
o-Xylene	95-47-6	C9-C12	mg/kg	23.7	0.31	
m,p-Xylene		C9-C12	mg/kg	39.4	0.31	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	mg/kg	118 ^A	63	
C9- C12 Aliphatics		N/A	mg/kg	398 ^o	63	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	% 83 70-130 %
PID 2,3,4-Trifluorotoluene	% 78 70-130 %
Footnotes	
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in their range	
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in their range	C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in their range
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in their range	C9-C12 Aromatic Hydrocarbons exclude the concentration of Target Analytes eluting in their range
D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in their range	C9-C12 Aromatic Hydrocarbons exclude the concentration of Target Analytes eluting in their range
Z A "J" qualifier indicates an estimated value	

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No-Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.37 ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/25/2016

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4331	SW846 8260C						
MSL4331-BS	67-64-1	Acetone	BSP	REC	126	%	70-130
MSL4331-BS	71-43-2	Benzene	BSP	REC	100	%	70-130
MSL4331-BS	108-86-1	Bromobenzene	BSP	REC	94	%	70-130
MSL4331-BS	74-97-5	Bromochloromethane	BSP	REC	100	%	70-130
MSL4331-BS	75-27-4	Bromodichloromethane	BSP	REC	97	%	70-130
MSL4331-BS	75-25-2	Bromoform	BSP	REC	96	%	70-130
MSL4331-BS	74-83-9	Bromomethane	BSP	REC	193 a	%	70-130
MSL4331-BS	78-93-3	2-Butanone (MEK)	BSP	REC	193 a	%	70-130
MSL4331-BS	104-51-8	n-Butylbenzene	BSP	REC	110	%	70-130
MSL4331-BS	135-98-8	sec-Butylbenzene	BSP	REC	96	%	70-130
MSL4331-BS	98-06-6	tert-Butylbenzene	BSP	REC	95	%	70-130
MSL4331-BS	75-15-0	Carbon disulfide	BSP	REC	102	%	70-130
MSL4331-BS	56-23-5	Carbon tetrachloride	BSP	REC	105	%	70-130
MSL4331-BS	108-90-7	Chlorobenzene	BSP	REC	92	%	70-130
MSL4331-BS	75-00-3	Chloroethane	BSP	REC	119	%	70-130
MSL4331-BS	67-66-3	Chloroform	BSP	REC	102	%	70-130
MSL4331-BS	74-87-3	Chloromethane	BSP	REC	121	%	70-130
MSL4331-BS	95-49-8	o-Chlorotoluene	BSP	REC	102	%	70-130
MSL4331-BS	106-43-4	p-Chlorotoluene	BSP	REC	100	%	70-130
MSL4331-BS	108-20-3	Di-Isopropyl ether	BSP	REC	116	%	70-130
MSL4331-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	94	%	70-130
MSL4331-BS	124-48-1	Dibromochloromethane	BSP	REC	92	%	70-130
MSL4331-BS	106-93-4	1,2-Dibromoethane	BSP	REC	94	%	70-130
MSL4331-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	97	%	70-130
MSL4331-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	96	%	70-130
MSL4331-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	94	%	70-130
MSL4331-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	66	%	70-130
MSL4331-BS	75-34-3	1,1-Dichloroethane	BSP	REC	101	%	70-130
MSL4331-BS	107-06-2	1,2-Dichloroethane	BSP	REC	104	%	70-130
MSL4331-BS	75-35-4	1,1-Dichloroethene	BSP	REC	106	%	70-130
MSL4331-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	112	%	70-130
MSL4331-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	95	%	70-130
MSL4331-BS	78-87-5	1,2-Dichloropropane	BSP	REC	98	%	70-130
MSL4331-BS	142-28-9	1,3-Dichloropropane	BSP	REC	98	%	70-130
MSL4331-BS	594-20-7	2,2-Dichloropropane	BSP	REC	119	%	70-130
MSL4331-BS	563-58-6	1,1-Dichloropropene	BSP	REC	106	%	70-130
MSL4331-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	93	%	70-130
MSL4331-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	94	%	70-130
MSL4331-BS	123-91-1	1,4-Dioxane	BSP	REC	70	%	70-130
MSL4331-BS	60-29-7	Ethyl Ether	BSP	REC	102	%	70-130
MSL4331-BS	100-41-4	Ethylbenzene	BSP	REC	95	%	70-130
MSL4331-BS	87-68-3	Hexachlorobutadiene	BSP	REC	89	%	70-130

* Sample used for QC is not from job MC47325

SGS Accutest

Internal Sample Tracking Chronicle

EnviroTrac
Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00
Job No: MC47325

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC47325-6	MADEP VPH REV 1.1	18-AUG-16 15:59	DF			VMAVPH
MC47325-6	MADEP EPH REV 1.1	24-AUG-16 00:05	TA	17-AUG-16	IC	BMAEPH
MC47325-7	Collected: 12-AUG-16 13:00	By: FM	Received: 16-AUG-16	By: NT		
S-7						
MC47325-7	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-7	MADEP VPH REV 1.1	18-AUG-16 16:37	DF			VMAVPH
MC47325-7	MADEP EPH REV 1.1	24-AUG-16 00:32	TA	17-AUG-16	IC	BMAEPH
MC47325-8	Collected: 12-AUG-16 13:15	By: FM	Received: 16-AUG-16	By: NT		
S-8						
MC47325-8	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-8	MADEP VPH REV 1.1	18-AUG-16 17:15	DF			VMAVPH
MC47325-8	MADEP EPH REV 1.1	24-AUG-16 01:28	TA	17-AUG-16	IC	BMAEPH
MC47325-9	Collected: 12-AUG-16 14:00	By: FM	Received: 16-AUG-16	By: NT		
STOCKPILE						
MC47325-9	SW846 1020	17-AUG-16	BF			IGN
MC47325-9	SM 2540G-97 MOD	17-AUG-16	CF			%SOL
MC47325-9	SW846 9045D	17-AUG-16 15:45	FL			PH
MC47325-9	SW846 CHAP7	18-AUG-16	BF	18-AUG-16	CF	SREAC
MC47325-9	SW846 8260C	18-AUG-16 17:14	TB			V8260MCP
MC47325-9	MADEP VPH REV 1.1	18-AUG-16 17:53	DF			VMAVPH
MC47325-9	SW846 6010C	19-AUG-16 13:34	EAL	18-AUG-16	EM	AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN
MC47325-9	SW846 CHAP7	19-AUG-16 17:49	CF	18-AUG-16	CF	CREAC
MC47325-9	SW846 8082A	20-AUG-16 17:08	AP	17-AUG-16	PA	P8082MCP
MC47325-9	EPA 120.1M	22-AUG-16	CF			SCON
MC47325-9	SW846 7471B	22-AUG-16 13:47	EAL	19-AUG-16	FM	HG
MC47325-9	SW846 6010C	22-AUG-16 16:36	EAL	18-AUG-16	EM	AG
MC47325-9	SW846 8270D	23-AUG-16 01:45	TR	18-AUG-16	HBM	AB8270MCP
MC47325-9	MADEP EPH REV 1.1	24-AUG-16 01:56	TA	17-AUG-16	AW	BMAEPH
MC47325-9	MADEP EPH REV 1.1	24-AUG-16 11:27	TA	17-AUG-16	AW	BMAEPH

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result	Units	Limits
MSL4331-BSD	74-83-9	Bromomethane	BSD	REC 190 ^a	%	70-130
MSL4331-BSD	74-83-9	Bromomethane	BSD	RPD 1	%	20
MSL4331-BSD	78-93-3	2-Butanone (MEK)	BSD	REC 182 ^a	%	70-130
MSL4331-BSD	78-93-3	2-Butanone (MEK)	BSD	RPD 6	%	20
MSL4331-BSD	104-51-8	n-Butylbenzene	BSD	REC 108	%	70-130
MSL4331-BSD	104-51-8	n-Butylbenzene	BSD	RPD 3	%	20
MSL4331-BSD	135-98-8	sec-Butylbenzene	BSD	REC 94	%	70-130
MSL4331-BSD	135-98-8	sec-Butylbenzene	BSD	RPD 3	%	20
MSL4331-BSD	98-06-6	tert-Butylbenzene	BSD	REC 93	%	70-130
MSL4331-BSD	98-06-6	tert-Butylbenzene	BSD	RPD 2	%	20
MSL4331-BSD	75-15-0	Carbon disulfide	BSD	REC 96	%	70-130
MSL4331-BSD	75-15-0	Carbon disulfide	BSD	RPD 6	%	20
MSL4331-BSD	56-23-5	Carbon tetrachloride	BSD	REC 101	%	70-130
MSL4331-BSD	56-23-5	Carbon tetrachloride	BSD	RPD 4	%	20
MSL4331-BSD	108-90-7	Chlorobenzene	BSD	REC 92	%	70-130
MSL4331-BSD	108-90-7	Chlorobenzene	BSD	RPD 0	%	20
MSL4331-BSD	75-00-3	Chloroethane	BSD	REC 112	%	70-130
MSL4331-BSD	75-00-3	Chloroethane	BSD	RPD 6	%	20
MSL4331-BSD	67-66-3	Chloroform	BSD	REC 98	%	70-130
MSL4331-BSD	67-66-3	Chloroform	BSD	RPD 4	%	20
MSL4331-BSD	74-87-3	Chloromethane	BSD	REC 116	%	70-130
MSL4331-BSD	74-87-3	Chloromethane	BSD	RPD 4	%	20
MSL4331-BSD	95-49-8	o-Chlorotoluene	BSD	REC 99	%	70-130
MSL4331-BSD	95-49-8	o-Chlorotoluene	BSD	RPD 2	%	20
MSL4331-BSD	106-43-4	p-Chlorotoluene	BSD	REC 98	%	70-130
MSL4331-BSD	106-43-4	p-Chlorotoluene	BSD	RPD 2	%	20
MSL4331-BSD	108-20-3	Di-Isopropyl ether	BSD	REC 114	%	70-130
MSL4331-BSD	108-20-3	Di-Isopropyl ether	BSD	RPD 2	%	20
MSL4331-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	REC 92	%	70-130
MSL4331-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	RPD 1	%	20
MSL4331-BSD	124-48-1	Dibromochloromethane	BSD	REC 92	%	70-130
MSL4331-BSD	124-48-1	Dibromochloromethane	BSD	RPD 0	%	20
MSL4331-BSD	106-93-4	1,2-Dibromoethane	BSD	REC 94	%	70-130
MSL4331-BSD	106-93-4	1,2-Dibromoethane	BSD	RPD 0	%	20
MSL4331-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC 96	%	70-130
MSL4331-BSD	95-50-1	1,2-Dichlorobenzene	BSD	RPD 2	%	20
MSL4331-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC 95	%	70-130
MSL4331-BSD	541-73-1	1,3-Dichlorobenzene	BSD	RPD 0	%	20
MSL4331-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC 94	%	70-130
MSL4331-BSD	106-46-7	1,4-Dichlorobenzene	BSD	RPD 1	%	20
MSL4331-BSD	75-71-8	Dichlorodifluoromethane	BSD	REC 62	%	70-130
MSL4331-BSD	75-71-8	Dichlorodifluoromethane	BSD	RPD 6	%	20
MSL4331-BSD	75-34-3	1,1-Dichloroethane	BSD	REC 97	%	70-130
MSL4331-BSD	75-34-3	1,1-Dichloroethane	BSD	RPD 4	%	20
MSL4331-BSD	107-06-2	1,2-Dichloroethane	BSD	REC 100	%	70-130

* Sample used for QC is not from job MC47325



QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result	Units	Limits
MSL4331-BS	591-78-6	2-Hexanone	BSP	REC 127	%	70-130
MSL4331-BS	98-82-8	Isopropylbenzene	BSP	REC 92	%	70-130
MSL4331-BS	99-87-6	p-Isopropyltoluene	BSP	REC 98	%	70-130
MSL4331-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC 114	%	70-130
MSL4331-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC 108	%	70-130
MSL4331-BS	74-95-3	Methylene bromide	BSP	REC 94	%	70-130
MSL4331-BS	75-09-2	Methylene chloride	BSP	REC 100	%	70-130
MSL4331-BS	91-20-3	Naphthalene	BSP	REC 85	%	70-130
MSL4331-BS	103-65-1	n-Propylbenzene	BSP	REC 100	%	70-130
MSL4331-BS	100-42-5	Styrene	BSP	REC 94	%	70-130
MSL4331-BS	994-05-8	tert-Amyl Methyl Ether	BSP	REC 112	%	70-130
MSL4331-BS	637-92-3	tert-Butyl Ethyl Ether	BSP	REC 98	%	70-130
MSL4331-BS	630-20-6	1,1,2-Tetrachloroethane	BSP	REC 95	%	70-130
MSL4331-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC 96	%	70-130
MSL4331-BS	127-18-4	Tetrachloroethene	BSP	REC 92	%	70-130
MSL4331-BS	109-99-9	Tetrahydrofuran	BSP	REC 102	%	70-130
MSL4331-BS	108-88-3	Toluene	BSP	REC 99	%	70-130
MSL4331-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC 86	%	70-130
MSL4331-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC 91	%	70-130
MSL4331-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC 104	%	70-130
MSL4331-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC 94	%	70-130
MSL4331-BS	79-01-6	Trichloroethene	BSP	REC 95	%	70-130
MSL4331-BS	75-69-4	Trichlorofluoromethane	BSP	REC 92	%	70-130
MSL4331-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC 93	%	70-130
MSL4331-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC 101	%	70-130
MSL4331-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC 107	%	70-130
MSL4331-BS	75-01-4	Vinyl chloride	BSP	REC 95	%	70-130
MSL4331-BS		m,p-Xylene	BSP	REC 94	%	70-130
MSL4331-BS	95-47-6	o-Xylene	BSP	REC 92	%	70-130
MSL4331-BS	1330-20-7	Xylene (total)	BSP	REC 93	%	70-130
MSL4331-BS	1868-53-7	Dibromofluoromethane	BSP	SURR 104	%	70-130
MSL4331-BS	2037-26-5	Toluene-D8	BSP	SURR 97	%	70-130
MSL4331-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR 96	%	70-130
MSL4331-BSD	67-64-1	Acetone	BSD	REC 121	%	70-130
MSL4331-BSD	67-64-1	Acetone	BSD	RPD 4	%	20
MSL4331-BSD	71-43-2	Benzene	BSD	REC 97	%	70-130
MSL4331-BSD	71-43-2	Benzene	BSD	RPD 3	%	20
MSL4331-BSD	108-86-1	Bromobenzene	BSD	REC 92	%	70-130
MSL4331-BSD	108-86-1	Bromobenzene	BSD	RPD 2	%	20
MSL4331-BSD	74-97-5	Bromochloromethane	BSD	REC 96	%	70-130
MSL4331-BSD	74-97-5	Bromochloromethane	BSD	RPD 4	%	20
MSL4331-BSD	75-27-4	Bromodichloromethane	BSD	REC 96	%	70-130
MSL4331-BSD	75-27-4	Bromodichloromethane	BSD	RPD 1	%	20
MSL4331-BSD	75-25-2	Bromoform	BSD	REC 96	%	70-130
MSL4331-BSD	75-25-2	Bromoform	BSD	RPD 0	%	20

* Sample used for QC is not from job MC47325



QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4331-BSD	100-42-5	Styrene	BSD	REC	92	%	70-130
MSL4331-BSD	100-42-5	Styrene	BSD	RPD	2	%	20
MSL4331-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	REC	110	%	70-130
MSL4331-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	RPD	2	%	20
MSL4331-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	REC	96	%	70-130
MSL4331-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	RPD	2	%	20
MSL4331-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	REC	94	%	70-130
MSL4331-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	RPD	1	%	20
MSL4331-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	REC	94	%	70-130
MSL4331-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	RPD	2	%	20
MSL4331-BSD	127-18-4	Tetrachloroethene	BSD	REC	92	%	70-130
MSL4331-BSD	127-18-4	Tetrachloroethene	BSD	RPD	0	%	20
MSL4331-BSD	109-99-9	Tetrahydrofuran	BSD	REC	102	%	70-130
MSL4331-BSD	109-99-9	Tetrahydrofuran	BSD	RPD	0	%	20
MSL4331-BSD	108-88-3	Toluene	BSD	REC	96	%	70-130
MSL4331-BSD	108-88-3	Toluene	BSD	RPD	3	%	20
MSL4331-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	REC	83	%	70-130
MSL4331-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	RPD	4	%	20
MSL4331-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	88	%	70-130
MSL4331-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	RPD	3	%	20
MSL4331-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	100	%	70-130
MSL4331-BSD	71-55-6	1,1,1-Trichloroethane	BSD	RPD	5	%	20
MSL4331-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	92	%	70-130
MSL4331-BSD	79-00-5	1,1,2-Trichloroethane	BSD	RPD	3	%	20
MSL4331-BSD	79-01-6	Trichloroethene	BSD	REC	93	%	70-130
MSL4331-BSD	79-01-6	Trichloroethene	BSD	RPD	3	%	20
MSL4331-BSD	75-69-4	Trichlorofluoromethane	BSD	REC	87	%	70-130
MSL4331-BSD	75-69-4	Trichlorofluoromethane	BSD	RPD	6	%	20
MSL4331-BSD	96-18-4	1,2,3-Trichloropropane	BSD	REC	92	%	70-130
MSL4331-BSD	96-18-4	1,2,3-Trichloropropane	BSD	RPD	1	%	20
MSL4331-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	REC	99	%	70-130
MSL4331-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	RPD	2	%	20
MSL4331-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	REC	104	%	70-130
MSL4331-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	RPD	3	%	20
MSL4331-BSD	75-01-4	Vinyl chloride	BSD	REC	89	%	70-130
MSL4331-BSD	75-01-4	Vinyl chloride	BSD	RPD	7	%	20
MSL4331-BSD		m,p-Xylene	BSD	REC	92	%	70-130
MSL4331-BSD		m,p-Xylene	BSD	RPD	2	%	20
MSL4331-BSD	95-47-6	o-Xylene	BSD	REC	93	%	70-130
MSL4331-BSD	95-47-6	o-Xylene	BSD	RPD	1	%	20
MSL4331-BSD	1330-20-7	Xylene (total)	BSD	REC	92	%	70-130
MSL4331-BSD	1330-20-7	Xylene (total)	BSD	RPD	1	%	20
MSL4331-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	102	%	70-130
MSL4331-BSD	2037-26-5	Toluene-D8	BSD	SURR	96	%	70-130
MSL4331-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	97	%	70-130

* Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4331-BSD	107-06-2	1,2-Dichloroethane	BSD	RPD	3	%	20
MSL4331-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	101	%	70-130
MSL4331-BSD	75-35-4	1,1-Dichloroethene	BSD	RPD	5	%	20
MSL4331-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	107	%	70-130
MSL4331-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	RPD	5	%	20
MSL4331-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	REC	90	%	70-130
MSL4331-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	RPD	6	%	20
MSL4331-BSD	78-87-5	1,2-Dichloropropane	BSD	REC	96	%	70-130
MSL4331-BSD	78-87-5	1,2-Dichloropropane	BSD	RPD	2	%	20
MSL4331-BSD	142-28-9	1,3-Dichloropropane	BSD	REC	98	%	70-130
MSL4331-BSD	142-28-9	1,3-Dichloropropane	BSD	RPD	1	%	20
MSL4331-BSD	594-20-7	2,2-Dichloropropane	BSD	REC	112	%	70-130
MSL4331-BSD	594-20-7	2,2-Dichloropropane	BSD	RPD	6	%	20
MSL4331-BSD	563-58-6	1,1-Dichloropropene	BSD	REC	102	%	70-130
MSL4331-BSD	563-58-6	1,1-Dichloropropene	BSD	RPD	4	%	20
MSL4331-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	REC	92	%	70-130
MSL4331-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	RPD	1	%	20
MSL4331-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	REC	92	%	70-130
MSL4331-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	RPD	2	%	20
MSL4331-BSD	123-91-1	1,4-Dioxane	BSD	REC	67	%	70-130
MSL4331-BSD	123-91-1	1,4-Dioxane	BSD	RPD	4	%	20
MSL4331-BSD	60-29-7	Ethyl Ether	BSD	REC	101	%	70-130
MSL4331-BSD	60-29-7	Ethyl Ether	BSD	RPD	1	%	20
MSL4331-BSD	100-41-4	Ethylbenzene	BSD	REC	94	%	70-130
MSL4331-BSD	100-41-4	Ethylbenzene	BSD	RPD	1	%	20
MSL4331-BSD	87-68-3	Hexachlorobutadiene	BSD	REC	86	%	70-130
MSL4331-BSD	87-68-3	Hexachlorobutadiene	BSD	RPD	3	%	20
MSL4331-BSD	591-78-6	2-Hexanone	BSD	REC	124	%	70-130
MSL4331-BSD	591-78-6	2-Hexanone	BSD	RPD	3	%	20
MSL4331-BSD	98-82-8	Isopropylbenzene	BSD	REC	90	%	70-130
MSL4331-BSD	98-82-8	Isopropylbenzene	BSD	RPD	3	%	20
MSL4331-BSD	99-87-6	p-Isopropyltoluene	BSD	REC	96	%	70-130
MSL4331-BSD	99-87-6	p-Isopropyltoluene	BSD	RPD	3	%	20
MSL4331-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	111	%	70-130
MSL4331-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	RPD	2	%	20
MSL4331-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	REC	104	%	70-130
MSL4331-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	RPD	4	%	20
MSL4331-BSD	74-95-3	Methylene bromide	BSD	REC	92	%	70-130
MSL4331-BSD	74-95-3	Methylene bromide	BSD	RPD	3	%	20
MSL4331-BSD	75-09-2	Methylene chloride	BSD	REC	96	%	70-130
MSL4331-BSD	75-09-2	Methylene chloride	BSD	RPD	4	%	20
MSL4331-BSD	91-20-3	Naphthalene	BSD	REC	82	%	70-130
MSL4331-BSD	91-20-3	Naphthalene	BSD	RPD	4	%	20
MSL4331-BSD	103-65-1	n-Propylbenzene	BSD	REC	97	%	70-130
MSL4331-BSD	103-65-1	n-Propylbenzene	BSD	RPD	3	%	20

* Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggione Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP48454-BS	121-14-2	2,4-Dinitrotoluene	BSP	REC	78	%	40-140
OP48454-BS	606-20-2	2,6-Dinitrotoluene	BSP	REC	75	%	40-140
OP48454-BS	91-94-1	3,3'-Dichlorobenzidine	BSP	REC	31	%	40-140
OP48454-BS	53-70-3	Dibenz(a,h)anthracene	BSP	REC	73	%	40-140
OP48454-BS	132-64-9	Dibenzofuran	BSP	REC	70	%	40-140
OP48454-BS	84-74-2	Di-n-butyl phthalate	BSP	REC	79	%	40-140
OP48454-BS	117-84-0	Di-n-octyl phthalate	BSP	REC	70	%	40-140
OP48454-BS	84-66-2	Diethyl phthalate	BSP	REC	76	%	40-140
OP48454-BS	131-11-3	Dimethyl phthalate	BSP	REC	76	%	40-140
OP48454-BS	117-81-7	bis(2-Ethylhexyl)phthalate	BSP	REC	74	%	40-140
OP48454-BS	206-44-0	Fluoranthene	BSP	REC	78	%	40-140
OP48454-BS	86-73-7	Fluorene	BSP	REC	76	%	40-140
OP48454-BS	118-74-1	Hexachlorobenzene	BSP	REC	75	%	40-140
OP48454-BS	87-68-3	Hexachlorobutadiene	BSP	REC	60	%	40-140
OP48454-BS	77-47-4	Hexachlorocyclopentadiene	BSP	REC	46	%	40-140
OP48454-BS	67-72-1	Hexachloroethane	BSP	REC	51	%	40-140
OP48454-BS	193-39-5	Indeno(1,2,3-cd)pyrene	BSP	REC	69	%	40-140
OP48454-BS	78-59-1	Isophorone	BSP	REC	64	%	40-140
OP48454-BS	91-57-6	2-Methylnaphthalene	BSP	REC	66	%	40-140
OP48454-BS	91-20-3	Naphthalene	BSP	REC	62	%	40-140
OP48454-BS	98-95-3	Nitrobenzene	BSP	REC	65	%	40-140
OP48454-BS	621-64-7	N-Nitroso-di-n-propylamine	BSP	REC	68	%	40-140
OP48454-BS	86-30-6	N-Nitrosodiphenylamine	BSP	REC	70	%	40-140
OP48454-BS	85-01-8	Phenanthrene	BSP	REC	76	%	40-140
OP48454-BS	129-00-0	Pyrene	BSP	REC	77	%	40-140
OP48454-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	61	%	40-140
OP48454-BS	367-12-4	2-Fluorophenol	BSP	SURR	66	%	30-130
OP48454-BS	4165-62-2	Phenol-d5	BSP	SURR	69	%	30-130
OP48454-BS	118-79-6	2,4,6-Tribromophenol	BSP	SURR	88	%	30-130
OP48454-BS	4165-60-0	Nitrobenzene-d5	BSP	SURR	62	%	30-130
OP48454-BS	321-60-8	2-Fluorobiphenyl	BSP	SURR	73	%	30-130
OP48454-BS	1718-51-0	Terphenyl-d14	BSP	SURR	84	%	30-130
OP48454-BSD	65-85-0	Benzoic acid	BSD	RPD	88	%	30-130
OP48454-BSD	65-85-0	Benzoic acid	BSD	RPD	10	%	30
OP48454-BSD	95-57-8	2-Chlorophenol	BSD	REC	61	%	30-130
OP48454-BSD	95-57-8	2-Chlorophenol	BSD	RPD	15	%	30
OP48454-BSD	59-50-7	4-Chloro-3-methyl phenol	BSD	REC	68	%	30-130
OP48454-BSD	59-50-7	4-Chloro-3-methyl phenol	BSD	RPD	22	%	30
OP48454-BSD	120-83-2	2,4-Dichlorophenol	BSD	REC	68	%	30-130
OP48454-BSD	120-83-2	2,4-Dichlorophenol	BSD	RPD	19	%	30
OP48454-BSD	105-67-9	2,4-Dimethylphenol	BSD	REC	64	%	30-130
OP48454-BSD	105-67-9	2,4-Dimethylphenol	BSD	RPD	19	%	30
OP48454-BSD	51-28-5	2,4-Dinitrophenol	BSD	REC	80	%	30-130
OP48454-BSD	51-28-5	2,4-Dinitrophenol	BSD	RPD	10	%	30
OP48454-BSD	95-48-7	2-Methylphenol	BSD	REC	61	%	30-130

* Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggione Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MSL4331-MB	1868-53-7	Dibromofluoromethane	MB	SURR	119	%	70-130
MSL4331-MB	2037-26-5	Toluene-D8	MB	SURR	98	%	70-130
MSL4331-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	108	%	70-130
MC47325-9	1868-53-7	Dibromofluoromethane	SAMP	SURR	113	%	70-130
MC47325-9	2037-26-5	Toluene-D8	SAMP	SURR	102	%	70-130
MC47325-9	460-00-4	4-Bromofluorobenzene	SAMP	SURR	96	%	70-130
OP48454	SW846 8270D						
OP48454-BS	65-85-0	Benzoic acid	BSP	REC	96	%	30-130
OP48454-BS	95-57-8	2-Chlorophenol	BSP	REC	69	%	30-130
OP48454-BS	59-50-7	4-Chloro-3-methyl phenol	BSP	REC	84	%	30-130
OP48454-BS	120-83-2	2,4-Dichlorophenol	BSP	REC	82	%	30-130
OP48454-BS	105-67-9	2,4-Dimethylphenol	BSP	REC	77	%	30-130
OP48454-BS	51-28-5	2,4-Dinitrophenol	BSP	REC	87	%	30-130
OP48454-BS	95-48-7	2-Methylphenol	BSP	REC	71	%	30-130
OP48454-BS	3&4-Methylphenol	3&4-Methylphenol	BSP	REC	74	%	30-130
OP48454-BS	88-75-5	2-Nitrophenol	BSP	REC	79	%	30-130
OP48454-BS	100-02-7	4-Nitrophenol	BSP	REC	69	%	30-130
OP48454-BS	87-86-5	Pentachlorophenol	BSP	REC	92	%	30-130
OP48454-BS	108-95-2	Phenol	BSP	REC	74	%	30-130
OP48454-BS	95-95-4	2,4,5-Trichlorophenol	BSP	REC	86	%	30-130
OP48454-BS	88-06-2	2,4,6-Trichlorophenol	BSP	REC	87	%	30-130
OP48454-BS	83-32-9	Acenaphthene	BSP	REC	72	%	40-140
OP48454-BS	208-96-8	Acenaphthylene	BSP	REC	56	%	40-140
OP48454-BS	98-86-2	Acetophenone	BSP	REC	59	%	40-140
OP48454-BS	62-53-3	Aniline	BSP	REC	49	%	40-140
OP48454-BS	120-12-7	Anthracene	BSP	REC	72	%	40-140
OP48454-BS	56-55-3	Benzo(a)anthracene	BSP	REC	75	%	40-140
OP48454-BS	50-32-8	Benzo(a)pyrene	BSP	REC	69	%	40-140
OP48454-BS	205-99-2	Benzo(b)fluoranthene	BSP	REC	71	%	40-140
OP48454-BS	191-24-2	Benzo(g,h,i)perylene	BSP	REC	75	%	40-140
OP48454-BS	207-08-9	Benzo(k)fluoranthene	BSP	REC	72	%	40-140
OP48454-BS	101-55-3	4-Bromophenyl phenyl ether	BSP	REC	76	%	40-140
OP48454-BS	85-68-7	Butyl benzyl phthalate	BSP	REC	81	%	40-140
OP48454-BS	91-58-7	2-Chloronaphthalene	BSP	REC	70	%	40-140
OP48454-BS	106-47-8	4-Chloroaniline	BSP	REC	43	%	40-140
OP48454-BS	218-01-9	Chrysene	BSP	REC	74	%	40-140
OP48454-BS	111-91-1	bis(2-Chloroethoxy)methane	BSP	REC	65	%	40-140
OP48454-BS	111-44-4	bis(2-Chloroethyl)ether	BSP	REC	55	%	40-140
OP48454-BS	108-60-1	bis(2-Chloroisopropyl)ether	BSP	REC	62	%	40-140
OP48454-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	53	%	40-140
OP48454-BS	122-66-7	1,2-Diphenylhydrazine	BSP	REC	74	%	40-140
OP48454-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	50	%	40-140
OP48454-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	49	%	40-140

* Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Result Type	Result	Units	Limits
OP48454-BSD	111-91-1	bis(2-Chloroethoxy)methane	BSD	54	%	40-140
OP48454-BSD	111-91-1	bis(2-Chloroethoxy)methane	BSD	19	%	30
OP48454-BSD	111-44-4	bis(2-Chloroethyl)ether	BSD	49	%	40-140
OP48454-BSD	111-44-4	bis(2-Chloroethyl)ether	BSD	13	%	30
OP48454-BSD	108-60-1	bis(2-Chloroisopropyl)ether	BSD	54	%	40-140
OP48454-BSD	108-60-1	bis(2-Chloroisopropyl)ether	BSD	15	%	30
OP48454-BSD	95-50-1	1,2-Dichlorobenzene	BSD	51	%	40-140
OP48454-BSD	95-50-1	1,2-Dichlorobenzene	BSD	4	%	30
OP48454-BSD	122-66-7	1,2-Diphenylhydrazine	BSD	60	%	40-140
OP48454-BSD	122-66-7	1,2-Diphenylhydrazine	BSD	22	%	30
OP48454-BSD	541-73-1	1,3-Dichlorobenzene	BSD	51	%	40-140
OP48454-BSD	541-73-1	1,3-Dichlorobenzene	BSD	2	%	30
OP48454-BSD	106-46-7	1,4-Dichlorobenzene	BSD	50	%	40-140
OP48454-BSD	106-46-7	1,4-Dichlorobenzene	BSD	1	%	30
OP48454-BSD	121-14-2	2,4-Dinitrotoluene	BSD	68	%	40-140
OP48454-BSD	121-14-2	2,4-Dinitrotoluene	BSD	14	%	30
OP48454-BSD	606-20-2	2,6-Dinitrotoluene	BSD	65	%	40-140
OP48454-BSD	606-20-2	2,6-Dinitrotoluene	BSD	16	%	30
OP48454-BSD	91-94-1	3,3'-Dichlorobenzidine	BSD	36	%	40-140
OP48454-BSD	91-94-1	3,3'-Dichlorobenzidine	BSD	14	%	30
OP48454-BSD	53-70-3	Dibenz(o,a,h)anthracene	BSD	59	%	40-140
OP48454-BSD	53-70-3	Dibenz(o,a,h)anthracene	BSD	22	%	30
OP48454-BSD	132-64-9	Dibenzofuran	BSD	58	%	40-140
OP48454-BSD	132-64-9	Dibenzofuran	BSD	21	%	30
OP48454-BSD	84-74-2	Di-n-butyl phthalate	BSD	64	%	40-140
OP48454-BSD	84-74-2	Di-n-butyl phthalate	BSD	22	%	30
OP48454-BSD	117-84-0	Di-n-octyl phthalate	BSD	59	%	40-140
OP48454-BSD	117-84-0	Diethyl phthalate	BSD	19	%	30
OP48454-BSD	84-66-2	Diethyl phthalate	BSD	61	%	40-140
OP48454-BSD	84-66-2	Diethyl phthalate	BSD	23	%	30
OP48454-BSD	131-11-3	Dimethyl phthalate	BSD	61	%	40-140
OP48454-BSD	131-11-3	Dimethyl phthalate	BSD	22	%	30
OP48454-BSD	117-81-7	bis(2-Ethylhexyl)phthalate	BSD	61	%	40-140
OP48454-BSD	117-81-7	bis(2-Ethylhexyl)phthalate	BSD	20	%	30
OP48454-BSD	206-44-0	Fluoranthene	BSD	63	%	40-140
OP48454-BSD	206-44-0	Fluoranthene	BSD	22	%	30
OP48454-BSD	86-73-7	Fluorene	BSD	61	%	40-140
OP48454-BSD	86-73-7	Fluorene	BSD	22	%	30
OP48454-BSD	118-74-1	Hexachlorobenzene	BSD	61	%	40-140
OP48454-BSD	118-74-1	Hexachlorobenzene	BSD	22	%	30
OP48454-BSD	87-68-3	Hexachlorobutadiene	BSD	54	%	40-140
OP48454-BSD	87-68-3	Hexachlorobutadiene	BSD	11	%	30
OP48454-BSD	77-47-4	Hexachlorocyclopentadiene	BSD	40	%	40-140
OP48454-BSD	77-47-4	Hexachlorocyclopentadiene	BSD	14	%	30
OP48454-BSD	67-72-1	Hexachloroethane	BSD	52	%	40-140

• Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Result Type	Result	Units	Limits
OP48454-BSD	95-48-7	2-Methylphenol	BSD	16	%	30
OP48454-BSD		3&4-Methylphenol	BSD	62	%	30-130
OP48454-BSD		3&4-Methylphenol	BSD	18	%	30
OP48454-BSD	88-75-5	2-Nitrophenol	BSD	66	%	30-130
OP48454-BSD	88-75-5	2-Nitrophenol	BSD	6	%	30
OP48454-BSD	100-02-7	4-Nitrophenol	BSD	66	%	30-130
OP48454-BSD	100-02-7	4-Nitrophenol	BSD	18	%	30
OP48454-BSD	87-86-5	Pentachlorophenol	BSD	78	%	30-130
OP48454-BSD	87-86-5	Pentachlorophenol	BSD	16	%	30
OP48454-BSD	108-95-2	Phenol	BSD	62	%	30-130
OP48454-BSD	108-95-2	Phenol	BSD	18	%	30
OP48454-BSD	95-95-4	2,4,5-Trichlorophenol	BSD	70	%	30-130
OP48454-BSD	95-95-4	2,4,5-Trichlorophenol	BSD	22	%	30
OP48454-BSD	88-06-2	2,4,6-Trichlorophenol	BSD	72	%	30-130
OP48454-BSD	88-06-2	2,4,6-Trichlorophenol	BSD	20	%	30
OP48454-BSD	83-32-9	Acenaphthene	BSD	61	%	40-140
OP48454-BSD	83-32-9	Acenaphthene	BSD	19	%	30
OP48454-BSD	208-96-8	Acenaphthylene	BSD	47	%	40-140
OP48454-BSD	208-96-8	Acenaphthylene	BSD	20	%	30
OP48454-BSD	98-86-2	Acetophenone	BSD	51	%	40-140
OP48454-BSD	98-86-2	Acetophenone	BSD	15	%	30
OP48454-BSD	62-53-3	Aniline	BSD	38	%	40-140
OP48454-BSD	62-53-3	Aniline	BSD	25	%	30
OP48454-BSD	120-12-7	Anthracene	BSD	59	%	40-140
OP48454-BSD	120-12-7	Anthracene	BSD	21	%	30
OP48454-BSD	56-55-3	Benzo(a)anthracene	BSD	62	%	40-140
OP48454-BSD	56-55-3	Benzo(a)anthracene	BSD	20	%	30
OP48454-BSD	50-32-8	Benzo(a)pyrene	BSD	57	%	40-140
OP48454-BSD	50-32-8	Benzo(a)pyrene	BSD	21	%	30
OP48454-BSD	205-99-2	Benzo(b)fluoranthene	BSD	57	%	40-140
OP48454-BSD	205-99-2	Benzo(b)fluoranthene	BSD	24	%	30
OP48454-BSD	191-24-2	Benzo(g,h,i)perylene	BSD	61	%	40-140
OP48454-BSD	191-24-2	Benzo(g,h,i)perylene	BSD	22	%	30
OP48454-BSD	207-08-9	Benzo(k)fluoranthene	BSD	59	%	40-140
OP48454-BSD	207-08-9	Benzo(k)fluoranthene	BSD	19	%	30
OP48454-BSD	101-55-3	4-Bromophenyl phenyl ether	BSD	61	%	40-140
OP48454-BSD	101-55-3	4-Bromophenyl phenyl ether	BSD	23	%	30
OP48454-BSD	85-68-7	Butyl benzyl phthalate	BSD	66	%	40-140
OP48454-BSD	85-68-7	Butyl benzyl phthalate	BSD	21	%	30
OP48454-BSD	91-58-7	2-Chloronaphthalene	BSD	59	%	40-140
OP48454-BSD	91-58-7	2-Chloronaphthalene	BSD	18	%	30
OP48454-BSD	106-47-8	4-Chloroaniline	BSD	30 ^b	%	40-140
OP48454-BSD	106-47-8	4-Chloroaniline	BSD	36 ^b	%	30
OP48454-BSD	218-01-9	Chrysene	BSD	61	%	40-140
OP48454-BSD	218-01-9	Chrysene	BSD	20	%	30

• Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP48455-BS	877-09-8	Tetrachloro-m-xylene (sig#2)	BSP	SURR	81	%	30-150
OP48455-BS	2051-24-3	Decachlorobiphenyl (sig#1)	BSP	SURR	97	%	30-150
OP48455-BS	2051-24-3	Decachlorobiphenyl (sig#2)	BSP	SURR	99	%	30-150
OP48455-BSD	12674-11-2	Aroclor 1016	BSD	REC	81	%	40-140
OP48455-BSD	12674-11-2	Aroclor 1016	BSD	RPD	10	%	30
OP48455-BSD	11104-28-2	Aroclor 1221	BSD	RPD	0	%	30
OP48455-BSD	11141-16-5	Aroclor 1232	BSD	RPD	0	%	30
OP48455-BSD	53469-21-9	Aroclor 1242	BSD	RPD	0	%	30
OP48455-BSD	12672-29-6	Aroclor 1248	BSD	RPD	0	%	30
OP48455-BSD	11097-69-1	Aroclor 1254	BSD	RPD	0	%	30
OP48455-BSD	11096-82-5	Aroclor 1260	BSD	REC	83	%	40-140
OP48455-BSD	11096-82-5	Aroclor 1260	BSD	RPD	12	%	30
OP48455-BSD	37324-23-5	Aroclor 1262	BSD	RPD	0	%	30
OP48455-BSD	11100-14-4	Aroclor 1268	BSD	RPD	0	%	30
OP48455-BSD	877-09-8	Tetrachloro-m-xylene (sig#1)	BSD	SURR	72	%	30-150
OP48455-BSD	877-09-8	Tetrachloro-m-xylene (sig#2)	BSD	SURR	82	%	30-150
OP48455-BSD	2051-24-3	Decachlorobiphenyl (sig#1)	BSD	SURR	91	%	30-150
OP48455-BSD	2051-24-3	Decachlorobiphenyl (sig#2)	BSD	SURR	98	%	30-150
OP48455-MB	877-09-8	Tetrachloro-m-xylene (sig#1)	MB	SURR	73	%	30-150
OP48455-MB	877-09-8	Tetrachloro-m-xylene (sig#2)	MB	SURR	73	%	30-150
OP48455-MB	2051-24-3	Decachlorobiphenyl (sig#1)	MB	SURR	91	%	30-150
OP48455-MB	2051-24-3	Decachlorobiphenyl (sig#2)	MB	SURR	90	%	30-150
MC47325-9	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	67	%	30-150
MC47325-9	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	53	%	30-150
MC47325-9	2051-24-3	Decachlorobiphenyl (sig#1)	SAMP	SURR	58	%	30-150
MC47325-9	2051-24-3	Decachlorobiphenyl (sig#2)	SAMP	SURR	46	%	30-150

- (a) Outside control limits. Associated samples are non-detect for this compound.
(b) Outside control limits. Individual spike recoveries within in-house acceptance limits.
(c) Outside control limits due to matrix interference compounded by dilution.

* Sample used for QC is not from job MC47325

QC Evaluation: MA MCP Limits

Job Number: MC47325
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP48454-BSD	67-72-1	Hexachloroethane	BSD	RPD	0	%	30
OP48454-BSD	193-39-5	Indeno(1,2,3-cd)pyrene	BSD	REC	57	%	40-140
OP48454-BSD	193-39-5	Indeno(1,2,3-cd)pyrene	BSD	RPD	19	%	30
OP48454-BSD	78-59-1	Isophorone	BSD	REC	54	%	40-140
OP48454-BSD	78-59-1	Isophorone	BSD	RPD	17	%	30
OP48454-BSD	91-57-6	2-Methylnaphthalene	BSD	REC	57	%	40-140
OP48454-BSD	91-57-6	2-Methylnaphthalene	BSD	RPD	17	%	30
OP48454-BSD	91-20-3	Naphthalene	BSD	REC	54	%	40-140
OP48454-BSD	91-20-3	Naphthalene	BSD	RPD	14	%	30
OP48454-BSD	98-95-3	Nitrobenzene	BSD	REC	58	%	40-140
OP48454-BSD	98-95-3	Nitrobenzene	BSD	RPD	12	%	30
OP48454-BSD	621-64-7	N-Nitroso-di-n-propylamine	BSD	REC	57	%	40-140
OP48454-BSD	621-64-7	N-Nitroso-di-n-propylamine	BSD	RPD	19	%	30
OP48454-BSD	86-30-6	N-Nitrosodiphenylamine	BSD	REC	57	%	40-140
OP48454-BSD	86-30-6	N-Nitrosodiphenylamine	BSD	RPD	21	%	30
OP48454-BSD	85-01-8	Phenanthrene	BSD	REC	61	%	40-140
OP48454-BSD	85-01-8	Phenanthrene	BSD	RPD	23	%	30
OP48454-BSD	129-00-0	Pyrene	BSD	REC	64	%	40-140
OP48454-BSD	129-00-0	Pyrene	BSD	RPD	20	%	30
OP48454-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	54	%	40-140
OP48454-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	RPD	14	%	30
OP48454-BSD	367-12-4	2-Fluorophenol	BSD	SURR	58	%	30-130
OP48454-BSD	4165-62-2	Phenol-d5	BSD	SURR	58	%	30-130
OP48454-BSD	118-79-6	2,4,6-Tribromophenol	BSD	SURR	76	%	30-130
OP48454-BSD	4165-60-0	Nitrobenzene-d5	BSD	SURR	58	%	30-130
OP48454-BSD	321-60-8	2-Fluorobiphenyl	BSD	SURR	61	%	30-130
OP48454-BSD	1718-51-0	Terphenyl-d14	BSD	SURR	69	%	30-130
OP48454-MB	367-12-4	2-Fluorophenol	MB	SURR	55	%	30-130
OP48454-MB	4165-62-2	Phenol-d5	MB	SURR	57	%	30-130
OP48454-MB	118-79-6	2,4,6-Tribromophenol	MB	SURR	63	%	30-130
OP48454-MB	4165-60-0	Nitrobenzene-d5	MB	SURR	52	%	30-130
OP48454-MB	321-60-8	2-Fluorobiphenyl	MB	SURR	58	%	30-130
OP48454-MB	1718-51-0	Terphenyl-d14	MB	SURR	66	%	30-130
MC47325-9	367-12-4	2-Fluorophenol	SAMP	SURR	62	%	30-130
MC47325-9	4165-62-2	Phenol-d5	SAMP	SURR	79	%	30-130
MC47325-9	118-79-6	2,4,6-Tribromophenol	SAMP	SURR	163 ^c	%	30-130
MC47325-9	4165-60-0	Nitrobenzene-d5	SAMP	SURR	0 ^c	%	30-130
MC47325-9	321-60-8	2-Fluorobiphenyl	SAMP	SURR	82	%	30-130
MC47325-9	1718-51-0	Terphenyl-d14	SAMP	SURR	83	%	30-130
OP48455	SW846 8082A						
OP48455-BS	12674-11-2	Aroclor 1016	BSP	REC	85	%	40-140
OP48455-BS	11096-82-5	Aroclor 1260	BSP	REC	89	%	40-140
OP48455-BS	877-09-8	Tetrachloro-m-xylene (sig#1)	BSP	SURR	78	%	30-150

* Sample used for QC is not from job MC47325

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4331-MB	L99670.D	1	08/18/16	TB	n/a	n/a	MSL4331

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8260C

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	500	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	By	Analyzed	Prep Date	Prep Batch	Analytical Batch
MSL4331-MB	L99670.D	1	TB	08/18/16	n/a	n/a	MSL4331

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8260C

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	119%
2037-26-5	Toluene-D8	98%
460-00-4	4-Bromofluorobenzene	108%

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	By	Analyzed	Prep Date	Prep Batch	Analytical Batch
MSL4331-MB	L99670.D	1	TB	08/18/16	n/a	n/a	MSL4331

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8260C

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
123-91-1	1,4-Dioxane	ND	6300	ug/kg	
60-29-7	Ethyl Ether	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	500	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
994-05-8	tert-Amyl Methyl Ether	ND	250	ug/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	100	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
109-99-9	Tetrahydrofuran	ND	500	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
95-47-6	m,p-Xylene	ND	100	ug/kg	
	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4331-BS	L99666.D	1	08/18/16	TB	n/a	n/a	MSL4331
MSL4331-BSD	L99667.D	1	08/18/16	TB	n/a	n/a	MSL4331

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8260C

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2330	93	2300	92	1	75-126/25
10061-02-6	trans-1,3-Dichloropropene	2500	2350	94	2300	92	2	75-128/25
123-91-1	1,4-Dioxane	12500	8720	70	8390	67	4	48-156/25
60-29-7	Ethyl Ether	2500	2550	102	2520	101	1	68-141/25
100-41-4	Ethylbenzene	2500	2370	95	2340	94	1	76-122/25
87-68-3	Hexachlorobutadiene	2500	2220	89	2160	86	3	73-137/25
591-78-6	2-Hexanone	2500	3180	127	3090	124	3	26-169/25
98-82-8	Isopropylbenzene	2500	2310	92	2250	90	3	69-124/25
99-87-6	p-Isopropyltoluene	2500	2460	98	2390	96	3	73-124/25
1634-04-4	Methyl Tert Butyl Ether	2500	2840	114	2770	111	2	58-133/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2700	108	2600	104	4	43-166/25
74-95-3	Methylene bromide	2500	2350	94	2290	92	3	76-125/25
75-09-2	Methylene chloride	2500	2500	100	2400	96	4	74-125/25
91-20-3	Naphthalene	2500	2120	85	2040	82	4	39-158/25
103-65-1	n-Propylbenzene	2500	2500	100	2420	97	3	69-121/25
100-42-5	Styrene	2500	2350	94	2310	92	2	79-124/25
994-05-8	tert-Amyl Methyl Ether	2500	2810	112	2750	110	2	32-153/25
637-92-3	tert-Butyl Ethyl Ether	2500	2450	98	2390	96	2	41-147/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	2370	95	2350	94	1	75-136/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2400	96	2350	94	2	66-134/25
127-18-4	Tetrachloroethene	2500	2310	92	2310	92	0	76-125/25
109-99-9	Tetrahydrofuran	2500	2550	102	2540	102	0	34-177/25
108-88-3	Toluene	2500	2480	99	2400	96	3	76-119/25
87-61-6	1,2,3-Trichlorobenzene	2500	2160	86	2080	83	4	52-146/25
120-82-1	1,2,4-Trichlorobenzene	2500	2280	91	2210	88	3	66-133/25
71-55-6	1,1,1-Trichloroethane	2500	2610	104	2490	100	5	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2350	94	2290	92	3	75-124/25
79-01-6	Trichloroethene	2500	2380	95	2320	93	3	74-127/25
75-69-4	Trichlorofluoromethane	2500	2310	92	2180	87	6	48-156/25
96-18-4	1,2,3-Trichloropropane	2500	2320	93	2290	92	1	65-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2530	101	2470	99	2	69-119/25
108-67-8	1,3,5-Trimethylbenzene	2500	2670	107	2600	104	3	69-123/25
75-01-4	Vinyl chloride	2500	2380	95	2230	89	7	33-166/25
95-47-6	m,p-Xylene	5000	4680	94	4610	92	2	78-122/25
1330-20-7	o-Xylene	2500	2300	92	2320	93	1	77-123/25
	Xylene (total)	7500	6980	93	6930	92	1	78-122/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4331-BS	L99666.D	1	08/18/16	TB	n/a	n/a	MSL4331
MSL4331-BSD	L99667.D	1	08/18/16	TB	n/a	n/a	MSL4331

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8260C

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	3150	126	3030	121	4	24-179/25
71-43-2	Benzene	2500	2490	100	2420	97	3	73-115/25
108-86-1	Bromobenzene	2500	2360	94	2310	92	2	76-121/25
74-97-5	Bromochloromethane	2500	2500	100	2410	96	4	76-129/25
75-27-4	Bromodichloromethane	2500	2420	97	2400	96	1	76-122/25
75-25-2	Bromoform	2500	2410	96	2400	96	0	67-151/25
74-83-9	Bromomethane	2500	4820	193** a	4750	190** a	1	52-139/25
78-93-3	2-Butanone (MEK)	2500	4830	193** a	4550	182** a	6	32-151/25
104-51-8	n-Butylbenzene	2500	2760	110	2690	108	3	71-124/25
135-98-8	sec-Butylbenzene	2500	2400	96	2340	94	3	71-124/25
98-06-6	tert-Butylbenzene	2500	2370	95	2330	93	2	66-125/25
75-15-0	Carbon disulfide	2500	2550	102	2400	96	6	57-143/25
56-23-5	Carbon tetrachloride	2500	2630	105	2520	101	4	73-129/25
108-90-7	Chlorobenzene	2500	2310	92	2300	92	0	79-123/25
75-00-3	Chloroethane	2500	2970	119	2810	112	6	51-159/25
67-66-3	Chloroform	2500	2560	102	2460	98	4	72-122/25
74-87-3	Chloromethane	2500	3020	121	2890	116	4	57-143/25
95-49-8	o-Chlorotoluene	2500	2540	102	2480	99	2	68-121/25
106-43-4	p-Chlorotoluene	2500	2510	100	2450	98	2	68-119/25
108-20-3	Di-Isopropyl ether	2500	2910	116	2840	114	2	63-142/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2340	94	2310	92	1	52-132/25
124-48-1	Dibromochloromethane	2500	2300	92	2310	92	0	74-139/25
106-93-4	1,2-Dibromomethane	2500	2340	94	2350	94	0	76-130/25
95-50-1	1,2-Dichlorobenzene	2500	2430	97	2390	96	2	73-122/25
541-73-1	1,3-Dichlorobenzene	2500	2390	96	2380	95	0	74-119/25
106-46-7	1,4-Dichlorobenzene	2500	2360	94	2340	94	1	75-118/25
75-71-8	Dichlorodifluoromethane	2500	1660	66	1560	62	6	11-183/25
75-34-3	1,1-Dichloroethane	2500	2530	101	2520	97	4	70-128/25
107-06-2	1,2-Dichloroethane	2500	2590	104	2510	100	3	70-126/25
75-35-4	1,1-Dichloroethene	2500	2660	106	2530	101	5	71-136/25
156-59-2	cis-1,2-Dichloroethene	2500	2800	112	2670	107	5	78-128/25
156-60-5	trans-1,2-Dichloroethene	2500	2370	95	2240	90	6	71-131/25
78-87-5	1,2-Dichloropropane	2500	2460	98	2400	96	2	79-124/25
142-28-9	1,3-Dichloropropane	2500	2460	98	2440	98	1	78-128/25
594-20-7	2,2-Dichloropropane	2500	2970	119	2790	112	6	54-145/25
563-58-6	1,1-Dichloropropene	2500	2660	106	2550	102	4	67-125/25

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Check Std:	MSL4331-CC4322	Injection Date:	08/18/16
Lab File ID:	L99665.D	Injection Time:	12:02
Instrument ID:	GMSL	Method:	SW846 8260C

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	153943	9.57	234118	10.46	134102	13.66	141349	16.23	44403	7.54
Upper Limit ^a	307886	10.07	468236	10.96	268204	14.16	282698	16.73	88806	8.04
Lower Limit ^b	76972	9.07	117059	9.96	67051	13.16	70675	15.73	22202	7.04

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
MSL4331-BS	166800	9.57	252918	10.46	141112	13.66	145767	16.23	50692	7.54
MSL4331-BSD	177371	9.57	268867	10.46	145322	13.66	150563	16.23	51455	7.54
MSL4331-MB	123267	9.57	197174	10.46	106615	13.66	90337	16.23	33663	7.53
ZZZZZZ	137971	9.56	210705	10.46	111122	13.66	96880	16.23	49879	7.55
ZZZZZZ	136894	9.57	211746	10.46	113714	13.66	96960	16.23	47911	7.55
MC47312-4	134547	9.57	209321	10.46	111754	13.66	96957	16.23	42351	7.54
ZZZZZZ	122690	9.57	207382	10.46	128111	13.66	113471	16.23	40805	7.53
ZZZZZZ	136071	9.57	224567	10.46	139687	13.66	131057	16.23	45494	7.53
MC47325-9	148427	9.57	242801	10.46	147545	13.66	173734	16.23	52949	7.53
ZZZZZZ	221907	9.56	338250	10.45	176907	13.66	171666	16.23	84652	7.55
ZZZZZZ	219571	9.56	323503	10.45	172828	13.66	162299	16.23	91085 ^c	7.55
MC47312-4MS	230030	9.57	347209	10.46	190779	13.66	192133	16.23	62170	7.54
MC47312-4MSD	223291	9.56	333647	10.45	182788	13.66	190843	16.23	68715	7.54

- IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits. Target analytes not associated with this internal standard.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL4331-BS	L99666.D	1	08/18/16	TB	n/a	n/a	MSL4331
MSL4331-BSD	L99667.D	1	08/18/16	TB	n/a	n/a	MSL4331

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8260C

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	104%	102%	65-141%
2037-26-5	Toluene-D8	97%	96%	65-129%
460-00-4	4-Bromofluorobenzene	96%	97%	63-137%

(a) Outside control limits. Associated samples are non-detect for this compound.

• = Outside of Control Limits.

Section 7

Volatile Surrogate Recovery Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: SW846 8260C	Matrix: SO
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Samples and QC shown here apply to the above method

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Lab Sample ID	Lab File ID	S1	S2	S3
MC47325-9	L99676.D	113	102	96
MSL4331-BS	L99666.D	104	97	96
MSL4331-BSD	L99667.D	102	96	97
MSL4331-MB	L99670.D	119	98	108
Surrogate Compounds		Recovery Limits		
S1 = Dibromofluoromethane		65-141%		
S2 = Toluene-D8		65-129%		
S3 = 4-Bromofluorobenzene		63-137%		

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48454-MB	W29518.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8270D

7.1.1



CAS No.	Compound	Result	RL	Units	Q
121-14-2	2,4-Dinitrotoluene	ND	490	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	490	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	490	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	98	ug/kg	
132-64-9	Dibenzofuran	ND	98	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	250	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	250	ug/kg	
84-66-2	Diethyl phthalate	ND	250	ug/kg	
131-11-3	Dimethyl phthalate	ND	250	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	250	ug/kg	
206-44-0	Fluoranthene	ND	98	ug/kg	
86-73-7	Fluorene	ND	98	ug/kg	
118-74-1	Hexachlorobenzene	ND	250	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	490	ug/kg	
67-72-1	Hexachloroethane	ND	250	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	250	ug/kg	
78-59-1	Isophorone	ND	250	ug/kg	
91-57-6	2-Methylnaphthalene	ND	98	ug/kg	
91-20-3	Naphthalene	ND	98	ug/kg	
98-95-3	Nitrobenzene	ND	250	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	250	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	250	ug/kg	
85-01-8	Phenanthrene	ND	98	ug/kg	
129-00-0	Pyrene	ND	98	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	

CAS No. Surrogate Recoveries

Limits

367-12-4	2-Fluorophenol	55%	25-109%
4165-62-2	Phenol-d5	57%	29-113%
118-79-6	2,4,6-Tribromophenol	63%	20-141%
4165-60-0	Nitrobenzene-d5	52%	27-115%
321-60-8	2-Fluorobiphenyl	58%	34-118%
1718-51-0	Terphenyl-d14	66%	42-139%

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48454-MB	W29518.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8270D

7.1.1



CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic acid	ND	490	ug/kg	
95-57-8	2-Chlorophenol	ND	250	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	490	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	490	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	490	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	490	ug/kg	
95-48-7	2-Methylphenol	ND	490	ug/kg	
	3&4-Methylphenol	ND	490	ug/kg	
88-75-5	2-Nitrophenol	ND	490	ug/kg	
100-02-7	4-Nitrophenol	ND	490	ug/kg	
87-86-5	Pentachlorophenol	ND	490	ug/kg	
108-95-2	Phenol	ND	250	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	490	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	490	ug/kg	
83-32-9	Acenaphthene	ND	98	ug/kg	
208-96-8	Acenaphthylene	ND	98	ug/kg	
98-86-2	Acetophenone	ND	490	ug/kg	
62-53-3	Aniline	ND	490	ug/kg	
120-12-7	Anthracene	ND	98	ug/kg	
56-55-3	Benzo(a)anthracene	ND	98	ug/kg	
50-32-8	Benzo(a)pyrene	ND	250	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	98	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	98	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	98	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	250	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	250	ug/kg	
91-58-7	2-Chloronaphthalene	ND	250	ug/kg	
106-47-8	4-Chloroaniline	ND	490	ug/kg	
218-01-9	Chrysene	ND	98	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	250	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	250	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	250	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	250	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	250	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	250	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	250	ug/kg	

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48454-BS	W29519.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189
OP48454-BSD	W29520.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8270D

7.2.1



CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
121-14-2	2,4-Dinitrotoluene	2450	1900	78	1650	68	14	50-121/30
606-20-2	2,6-Dinitrotoluene	2450	1840	75	1570	65	16	52-115/30
91-94-1	3,3'-Dichlorobenzidine	2450	765	31	884	36	14	17-120/30
53-70-3	Dibenz(a,h)anthracene	2450	1780	73	1430	59	22	54-121/30
132-64-9	Dibenzofuran	2450	1720	70	1400	58	21	52-109/30
84-74-2	Di-n-butyl phthalate	2450	1930	79	1550	64	22	55-113/30
117-84-0	Di-n-octyl phthalate	2450	1720	70	1420	59	19	53-126/30
84-66-2	Diethyl phthalate	2450	1870	76	1490	61	23	54-111/30
131-11-3	Dimethyl phthalate	2450	1850	76	1480	61	22	53-111/30
117-81-7	bis(2-Ethylhexyl)phthalate	2450	1820	74	1490	61	20	55-125/30
206-44-0	Fluoranthene	2450	1900	78	1520	63	22	55-116/30
86-73-7	Fluorene	2450	1860	76	1490	61	22	52-111/30
118-74-1	Hexachlorobenzene	2450	1840	75	1480	61	22	52-117/30
87-68-3	Hexachlorobutadiene	2450	1460	60	1310	54	11	36-108/30
77-47-4	Hexachlorocyclopentadiene	2450	1120	46	971	40	14	10-99/30
67-72-1	Hexachloroethane	2450	1250	51	1250	52	0	33-100/30
193-39-5	Indeno(1,2,3-cd)pyrene	2450	1680	69	1390	57	19	55-120/30
78-59-1	Isophorone	2450	1570	64	1320	54	17	37-101/30
91-57-6	2-Methylnaphthalene	2450	1620	66	1370	57	17	38-114/30
91-20-3	Naphthalene	2450	1510	62	1310	54	14	27-128/30
98-95-3	Nitrobenzene	2450	1580	65	1400	58	12	33-108/30
621-64-7	N-Nitroso-di-n-propylamine	2450	1670	68	1380	57	19	37-112/30
86-30-6	N-Nitrosodiphenylamine	2450	1710	70	1390	57	21	47-114/30
85-01-8	Phenanthrene	2450	1850	76	1470	61	23	54-112/30
129-00-0	Pyrene	2450	1880	77	1540	64	20	54-118/30
120-82-1	1,2,4-Trichlorobenzene	2450	1490	61	1300	54	14	38-105/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	66%	58%	25-109%
4165-62-2	Phenol-d5	69%	58%	29-113%
118-79-6	2,4,6-Tribromophenol	88%	76%	20-141%
4165-60-0	Nitrobenzene-d5	62%	58%	27-115%
321-60-8	2-Fluorobiphenyl	73%	61%	34-118%
1718-51-0	Terphenyl-d14	84%	69%	42-139%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48454-BS	W29519.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189
OP48454-BSD	W29520.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8270D

7.2.1



CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	2450	2360	96	2130	88	10	10-136/30
95-57-8	2-Chlorophenol	2450	1700	69	1470	61	15	39-104/30
59-50-7	4-Chloro-3-methyl phenol	2450	2060	84	1660	68	22	51-110/30
120-83-2	2,4-Dichlorophenol	2450	2000	82	1650	68	19	47-109/30
105-67-9	2,4-Dimethylphenol	2450	1880	77	1550	64	19	43-105/30
51-28-5	2,4-Dinitrophenol	2450	2140	87	1940	80	10	10-130/30
95-48-7	2-Methylphenol	2450	1740	71	1480	61	16	40-105/30
	3&4-Methylphenol	4890	3600	74	3000	62	18	39-113/30
88-75-5	2-Nitrophenol	2450	1680	69	1590	66	6	41-112/30
100-02-7	4-Nitrophenol	2450	1930	79	1610	66	18	28-134/30
87-86-5	Pentachlorophenol	2450	2240	92	1900	78	16	22-123/30
108-95-2	Phenol	2450	1800	74	1500	62	18	40-107/30
95-95-4	2,4,5-Trichlorophenol	2450	2110	86	1700	70	22	54-115/30
88-06-2	2,4,6-Trichlorophenol	2450	2130	87	1740	72	20	51-110/30
83-32-9	Acenaphthene	2450	1770	72	1470	61	19	49-108/30
208-96-8	Acenaphthylene	2450	1380	56	1130	47	20	37-102/30
98-86-2	Acetophenone	2450	1440	59	1240	51	15	37-105/30
62-53-3	Aniline	2450	1190	49	921	38	25	10-90/30
120-12-7	Anthracene	2450	1760	72	1420	59	21	54-111/30
56-55-3	Benzo(a)anthracene	2450	1840	75	1500	62	20	56-117/30
50-32-8	Benzo(a)pyrene	2450	1700	69	1370	57	21	57-117/30
205-99-2	Benzo(b)fluoranthene	2450	1740	71	1370	57	24	55-122/30
191-24-2	Benzo(g,h,i)perylene	2450	1830	75	1470	61	22	52-123/30
207-08-9	Benzo(k)fluoranthene	2450	1750	72	1440	59	19	54-117/30
101-55-3	4-Bromophenyl phenyl ether	2450	1870	76	1490	61	23	54-118/30
85-68-7	Butyl benzyl phthalate	2450	1980	81	1600	66	21	54-121/30
91-58-7	2-Chloronaphthalene	2450	1710	70	1430	59	18	46-114/30
106-47-8	4-Chloroaniline	2450	1060	43	734	30	36* a	12-88/30
218-01-9	Chrysene	2450	1810	74	1480	61	20	56-114/30
111-91-1	bis(2-Chloroethoxy)methane	2450	1590	65	1310	54	19	41-106/30
111-44-4	bis(2-Chloroethyl)ether	2450	1350	55	1190	49	13	28-113/30
108-60-1	bis(2-Chloroisopropyl)ether	2450	1510	62	1300	54	15	30-132/30
95-50-1	1,2-Dichlorobenzene	2450	1290	53	1240	51	4	34-100/30
122-66-7	1,2-Diphenylhydrazine	2450	1800	74	1450	60	22	43-117/30
541-73-1	1,3-Dichlorobenzene	2450	1220	50	1240	51	2	35-99/30
106-46-7	1,4-Dichlorobenzene	2450	1200	49	1210	50	1	35-98/30

* = Outside of Control Limits.

Semivolatiles Internal Standard Area Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Check Std:	MSW1189-CC1188	Injection Date:	08/22/16
Lab File ID:	W29517.D	Injection Time:	17:58
Instrument ID:	GCM5W	Method:	SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	189034	4.43	703893	5.49	432696	7.03	782942	8.33	808294	11.58	726913	14.89
Upper Limit ^a	378068	4.93	1407786	5.99	865392	7.53	1565884	8.83	1616588	12.08	1453826	15.39
Lower Limit ^b	94517	3.93	351947	4.99	216348	6.53	391471	7.83	404147	11.08	363457	14.39

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP48454-MB	220479	4.43	823008	5.49	499737	7.03	907397	8.33	901467	11.57	819092	14.89
OP48454-BS	223400	4.43	836493	5.49	514074	7.03	934598	8.33	949547	11.57	856338	14.89
OP48454-BSD	239631	4.43	893635	5.49	547688	7.03	988342	8.33	991503	11.57	893657	14.89
ZZZZZZ	237838	4.43	887906	5.49	543660	7.03	979923	8.33	970975	11.57	880660	14.89
ZZZZZZ	202225	4.43	764898	5.49	466218	7.03	863209	8.33	881002	11.58	811243	14.89
ZZZZZZ	231930	4.43	873839	5.49	536507	7.03	969592	8.33	963822	11.57	869894	14.89
ZZZZZZ	235294	4.43	879342	5.49	541827	7.03	975218	8.33	978408	11.58	871304	14.90
ZZZZZZ	229609	4.43	871907	5.49	537138	7.03	966295	8.33	969509	11.57	883787	14.89
ZZZZZZ	242129	4.43	911749	5.49	552661	7.03	100812	8.33	988404	11.57	887701	14.89
ZZZZZZ	226600	4.43	853962	5.49	521802	7.03	923991	8.33	979324	11.60	808533	14.90
ZZZZZZ	233940	4.43	880471	5.49	549794	7.03	989331	8.33	993169	11.58	885537	14.90
ZZZZZZ	222859	4.43	842054	5.49	515505	7.03	926191	8.33	916361	11.57	824274	14.89
ZZZZZZ	221517	4.43	839195	5.49	512028	7.03	927549	8.33	910181	11.57	807777	14.89
ZZZZZZ	239340	4.43	894864	5.49	550535	7.03	980843	8.33	956465	11.58	826943	14.89
ZZZZZZ	238004	4.43	900489	5.49	551313	7.03	990859	8.33	958958	11.58	831492	14.89
ZZZZZZ	232454	4.43	875775	5.49	538215	7.03	977371	8.33	972697	11.58	864574	14.89
ZZZZZZ	217831	4.45	798005	5.49	513761	7.03	922870	8.33	921495	11.58	831007	14.89
MC47325-9 ^c	204823	4.43	771959	5.49	479123	7.03	874264	8.33	940999	11.59	867731	14.91

- IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated RL due to dilution required for matrix interference.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48454-BS	W29519.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189
OP48454-BSD	W29520.D	1	08/22/16	MR	08/18/16	OP48454	MSW1189

The QC reported here applies to the following samples: Method: SW846 8270D

MC47325-9

(a) Outside control limits. Individual spike recoveries within in-house acceptance limits.

Section 8

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Semivolatle Surrogate Recovery Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: SW846 8270D

Matrix: SO

Samples and QC shown here apply to the above method

Lab	Lab	S1	S2	S3	S4	S5	S6
Sample ID	File ID						
MC47325-9	W29535.D	62	79	163* a	0* a	82	83
OP48454-BS	W29519.D	66	69	88	62	73	84
OP48454-BSD	W29520.D	58	58	76	58	61	69
OP48454-MB	W29518.D	55	57	63	52	58	66
Surrogate Compounds	Recovery Limits						
S1 = 2-Fluorophenol	25-109%						
S2 = Phenol-d5	29-113%						
S3 = 2,4,6-Tribromophenol	20-141%						
S4 = Nitrobenzene-d5	27-115%						
S5 = 2-Fluorobiphenyl	34-118%						
S6 = Terphenyl-d14	42-139%						

(a) Outside control limits due to matrix interference compounded by dilution.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB5243-BSP	AB94980.D	1	08/18/16	DF	n/a	n/a	GAB5243
GAB5243-BSD	AB94981.D	1	08/18/16	DF	n/a	n/a	GAB5243

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

MC 47325-1, MC 47325-2, MC 47325-3, MC 47325-4, MC 47325-5, MC 47325-6, MC 47325-7, MC 47325-8, MC 47325-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	2500	2720	109	2660	106	2	70-130/25
100-41-4	Ethylbenzene	2500	2700	108	2660	106	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2670	107	2630	105	2	70-130/25
91-20-3	Naphthalene	2500	2580	103	2550	102	1	70-130/25
108-88-3	Toluene	2500	2750	110	2690	108	2	70-130/25
95-47-6	m,p-Xylene	5000	5750	115	5630	113	2	70-130/25
	o-Xylene	2500	2710	108	2660	106	2	70-130/25
	C5- C8 Aliphatics (Unadj.)	7500	7740	103	7590	101	2	70-130/25
	C9- C12 Aliphatics (Unadj.)	7500	7740	103	7620	102	2	70-130/25
	C9- C10 Aromatics (Unadj.)	2500	2770	111	2720	109	2	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2,3,4-Trifluorotoluene	2,3,4-Trifluorotoluene	94%	95%	70-130%
		96%	97%	70-130%

* = Outside of Control Limits.

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB5243-MB	AB94979.D	1	08/18/16	DF	n/a	n/a	GAB5243

The QC reported here applies to the following samples:

Method: MADEP VPH REV 1.1

MC47325-1, MC47325-2, MC47325-3, MC47325-4, MC47325-5, MC47325-6, MC47325-7, MC47325-8, MC47325-9

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	250	ug/kg	
100-41-4	Ethylbenzene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
95-47-6	m,p-Xylene	ND	250	ug/kg	
	o-Xylene	ND	250	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	5000	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	5000	ug/kg	
C5- C8 Aliphatics	C9- C12 Aliphatics	ND	5000	ug/kg	
		ND	5000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
	2,3,4-Trifluorotoluene	97%
	2,3,4-Trifluorotoluene	99%
		70-130%
		70-130%

8.2.1



8.1.1





Section 9

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Volatile Surrogate Recovery Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: MADEP VPH REV 1.1	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
MC47325-1	AB94983.D	74	76
MC47325-2	AB94984.D	75	77
MC47325-3	AB94985.D	75	76
MC47325-4	AB94986.D	71	73
MC47325-5	AB94987.D	77	79
MC47325-6	AB94988.D	74	77
MC47325-7	AB94989.D	73	76
MC47325-8	AB94990.D	74	77
MC47325-9	AB94991.D	78	83
GAB5243-BSD	AB94981.D	95	97
GAB5243-BSP	AB94980.D	94	96
GAB5243-MB	AB94979.D	97	99

Surrogate Compounds Recovery Limits

S1 = 2,3,4-Trifluorotoluene 70-130%

- (a) Recovery from GC signal #2
- (b) Recovery from GC signal #1

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	By	Prep Date	Prep Batch	Analytical Batch
OP48455-MB	BK60845.D	1	NK	08/17/16	OP48455	GBK1912

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8082A

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	25	ug/kg	
11104-28-2	Aroclor 1221	ND	25	ug/kg	
11141-16-5	Aroclor 1232	ND	25	ug/kg	
53469-21-9	Aroclor 1242	ND	25	ug/kg	
12672-29-6	Aroclor 1248	ND	25	ug/kg	
11097-69-1	Aroclor 1254	ND	25	ug/kg	
11096-82-5	Aroclor 1260	ND	25	ug/kg	
37324-23-5	Aroclor 1262	ND	25	ug/kg	
11100-14-4	Aroclor 1268	ND	25	ug/kg	

CAS No. Surrogate Recoveries

	Limits
877-09-8 Tetrachloro-m-xylene	25-145%
877-09-8 Tetrachloro-m-xylene	25-145%
2051-24-3 Decachlorobiphenyl	25-179%
2051-24-3 Decachlorobiphenyl	25-179%

Method Blank Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	By	Prep Date	Prep Batch	Analytical Batch
OP48449-MB	DE15275.D	1	TA	08/17/16	OP48449	GDE853

The QC reported here applies to the following samples:

MC47325-1, MC47325-2, MC47325-3, MC47325-4, MC47325-5, MC47325-6, MC47325-7, MC47325-8, MC47325-9

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	420	ug/kg	
208-96-8	Acenaphthylene	ND	420	ug/kg	
120-12-7	Anthracene	ND	420	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	ug/kg	
50-32-8	Benzo(a)pyrene	ND	420	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	420	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	420	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	420	ug/kg	
218-01-9	Chrysene	ND	420	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	420	ug/kg	
206-44-0	Fluoranthene	ND	420	ug/kg	
86-73-7	Fluorene	ND	420	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	420	ug/kg	
91-57-6	2-Methylnaphthalene	ND	420	ug/kg	
91-20-3	Naphthalene	ND	420	ug/kg	
85-01-8	Phenanthrene	ND	420	ug/kg	
129-00-0	Pyrene	ND	420	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	17000	ug/kg	
	C9-C18 Aliphatics	ND	8500	ug/kg	
	C19-C36 Aliphatics	ND	17000	ug/kg	
	C11-C22 Aromatics	ND	17000	ug/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	93%
321-60-8	2-Fluorobiphenyl	80%
580-13-2	2-Bromonaphthalene	56%
3386-33-2	1-Chlorooctadecane	121%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

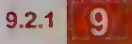
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48449-BS	DE15273.D	1	08/23/16	TA	08/17/16	OP48449	GDE853
OP48449-BSD	DE15274.D	1	08/23/16	TA	08/17/16	OP48449	GDE853

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

MC47325-1, MC47325-2, MC47325-3, MC47325-4, MC47325-5, MC47325-6, MC47325-7, MC47325-8, MC47325-9

- (a) Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.
(b) Range recovery satisfactory.



Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

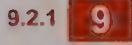
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48449-BS	DE15273.D	1	08/23/16	TA	08/17/16	OP48449	GDE853
OP48449-BSD	DE15274.D	1	08/23/16	TA	08/17/16	OP48449	GDE853

The QC reported here applies to the following samples:

Method: MADEP EPH REV 1.1

MC47325-1, MC47325-2, MC47325-3, MC47325-4, MC47325-5, MC47325-6, MC47325-7, MC47325-8, MC47325-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	4230	2480	59	2690	63	8	40-140/25
208-96-8	Acenaphthylene	4230	2440	58	2640	62	8	40-140/25
120-12-7	Anthracene	4230	2600	61	2850	67	9	40-140/25
56-55-3	Benzo(a)anthracene	4230	3280	78	3610	84	10	40-140/25
50-32-8	Benzo(a)pyrene	4230	3160	75	3470	81	9	40-140/25
205-99-2	Benzo(b)fluoranthene	4230	3520	83	3570	83	1	40-140/25
191-24-2	Benzo(g,h,i)perylene	4230	3400	80	3830	90	12	40-140/25
207-08-9	Benzo(k)fluoranthene	4230	2880	68	3440	80	18	40-140/25
218-01-9	Chrysene	4230	3050	72	3370	79	10	40-140/25
53-70-3	Dibenz(a,h)anthracene	4230	3320	78	3650	85	9	40-140/25
206-44-0	Fluoranthene	4230	3110	74	3410	80	9	40-140/25
86-73-7	Fluorene	4230	2660	63	2920	68	9	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	4230	3240	77	3640	85	12	40-140/25
91-57-6	2-Methylnaphthalene	4230	2430	57	2640	62	8	40-140/25
91-20-3	Naphthalene	4230	1910	45	2050	48	7	40-140/25
85-01-8	Phenanthrene	4230	2880	68	3210	75	11	40-140/25
129-00-0	Pyrene	4230	3070	73	3330	78	8	40-140/25
	C11-C22 Aromatics (Unadj.)	67700	54300	80 ^a	58700	86 ^a	8	40-140/25
	C9-C18 Aliphatics	25400	10900	43	15900	62	37 ^{*b}	40-140/25
	C19-C36 Aliphatics	33800	19200	57	28600	84	39 ^{*b}	40-140/25



CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	98%	98%	40-140%
321-60-8	2-Fluorobiphenyl	89%	86%	40-140%
580-13-2	2-Bromonaphthalene	55%	52%	40-140%
3386-33-2	1-Chlorooctadecane	84%	115%	40-140%
Sample	Compound	Col #1	Col #2	Breakthrough Limit

OP48449-BS	2-Methylnaphthalene	2430	97.1	3.8%	5.0
OP48449-BS	Naphthalene	1910	160	7.7%*	5.0
OP48449-BSD	2-Methylnaphthalene	2640	113	4.1%	5.0
OP48449-BSD	Naphthalene	2050	204	9.1%*	5.0

* = Outside of Control Limits.

Semivolatle Surrogate Recovery Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: SW846 8082A		Matrix: SO	
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
MC47325-9	BK60925.D	67	53	58	46
OP48455-BS	BK60846.D	78	81	97	99
OP48455-BSD	BK60847.D	72	82	91	98
OP48455-MB	BK60845.D	73	73	91	90

Surrogate Compounds

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	25-145%
S2 = Decachlorobiphenyl	25-179%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

9.3.19

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48455-BS	BK60846.D	1	08/19/16	NK	08/17/16	OP48455	GBK1912
OP48455-BSD	BK60847.D	1	08/19/16	NK	08/17/16	OP48455	GBK1912

The QC reported here applies to the following samples:

MC47325-9

Method: SW846 8082A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	264	226	85	205	81	10	47-144/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	264	236	89	210	83	12	45-156/30
37324-23-5	Aroclor 1262		ND		ND		nc	40-140/30
11100-14-4	Aroclor 1268		ND		ND		nc	40-140/30

CAS No. Surrogate Recoveries

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	78%	72%	25-145%
877-09-8	Tetrachloro-m-xylene	81%	82%	25-145%
2051-24-3	Decachlorobiphenyl	97%	91%	25-179%
2051-24-3	Decachlorobiphenyl	99%	98%	25-179%

* = Outside of Control Limits.

Section 10

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Semivolatile Surrogate Recovery Summary

Job Number: MC47325
Account: ENVTRAC EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: MADEP EPH REV 1.1 Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a	S3 ^a	S4 ^b
MC47325-1	DE15309.D	132	73	78	93
MC47325-2	DE15277.D	84	82	78	101
MC47325-3	DE15301.D	211* ^c	79	60	68
MC47325-3	DE15278.D	225* ^c	90	77	87
MC47325-4	DE15279.D	84	78	87	95
MC47325-5	DE15280.D	122	81	90	88
MC47325-6	DE15281.D	82	94	110	65
MC47325-7	DE15282.D	82	84	95	80
MC47325-8	DE15284.D	90	81	84	83
MC47325-9	DE15302.D	134	81	53	88
MC47325-9	DE15285.D	132	90	66	250* ^d
OP48449-BS	DE15273.D	98	89	55	84
OP48449-BS	DE15274.D	98	86	52	115
OP48449-MB	DE15275.D	93	80	56	121

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%
S2 = 2-Fluorobiphenyl	40-140%
S3 = 2-Bromonaphthalene	40-140%
S4 = 1-Chlorooctadecane	40-140%
(a) Recovery from GC signal #1	
(b) Recovery from GC signal #2	
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.	
(d) Outside control limits due to possible matrix interference.	

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MP26648
Matrix Type: SOLID
Methods: SW846 6010C
Units: mg/kg

Prep Date: 08/18/16

Metal	RL	IDL	MDL	MR raw	final
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Vanadium 1.0 .052 .04 0.010 <1.0
Zinc 2.0 .079 .17 1.2 <2.0
Zirconium 5.0 .036 .17

Associated samples MP26648: MC47325-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(enr) Analyte not requested

10.1.1 10

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MP26648
Matrix Type: SOLID
Methods: SW846 6010C
Units: mg/kg

Prep Date: 08/18/16

Metal	RL	IDL	MDL	MR raw	final
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Aluminum 20 2.6 1.2
Antimony 1.0 .18 .17 0.010 <1.0
Arsenic 1.0 .28 .2 -0.10 <1.0
Barium 5.0 .05 .076 0.060 <5.0
Beryllium 0.40 .018 .015 0.010 <0.40
Bismuth 5.0 .31 .15
Boron 10 .14 .13
Cadmium 0.40 .02 .031 -0.010 <0.40
Calcium 500 1.1 .86
Chromium 1.0 .057 .047 0.020 <1.0
Cobalt 5.0 .026 .031
Copper 2.5 .055 .1
Gold 5.0 .12 .11
Iron 10 .47 .44
Lead 1.0 .11 .11 0.040 <1.0
Lithium 50 .52 .18
Magnesium 500 4.7 4
Manganese 1.5 .0051 .047
Molybdenum 10 .16 .51
Nickel 4.0 .034 .057 0.070 <4.0
Palladium 5.0 .18 .14
Platinum 5.0 .87 .54
Potassium 500 7.4 3.4
Selenium 1.0 .28 .3 -0.080 <1.0
Silicon 10 1.5 .51
Silver 0.50 .075 .061 -0.060 <0.50
Sodium 500 2.3 1.2
Sulfur 5.0 .37 .31
Strontium 1.0 .027 .022
Thallium 1.0 .12 .11 0.080 <1.0
Tin 10 .052 .078
Titanium 5.0 .054 .054
Tungsten 10 .4 .93

10.1.1 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
QC Batch ID: MP26648
Matrix Type: SOLID
Methods: SW846 6010C
Units: mg/kg

Project: Maggiorre Somerville, 343 - 351 Summer Street, Somerville, MA
Account: ENVTRAC - EnviroTrac
Login Number: MC47325

Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
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Vanadium 48.3 50 96.6 80-120 49.1 50 98.2 1.6 20

Zinc 53.1 50 106.2 80-120 54.1 50 108.2 1.9 20

Zirconium

Associated samples MP26648: MC47325-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

10.1.2 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
QC Batch ID: MP26648
Matrix Type: SOLID
Methods: SW846 6010C
Units: mg/kg

Project: Maggiorre Somerville, 343 - 351 Summer Street, Somerville, MA
Account: ENVTRAC - EnviroTrac
Login Number: MC47325

Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
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Aluminum anr

Antimony 47.0 50 94.0 80-120 47.8 50 95.6 1.7 20

Arsenic 45.2 50 90.4 80-120 45.7 50 91.4 1.1 20

Barium 183 200 91.5 80-120 186 200 93.0 1.6 20

Beryllium 45.8 50 91.6 80-120 46.6 50 93.2 1.7 20

Bismuth

Boron

Cadmium 48.8 50 97.6 80-120 50.1 50 100.2 2.6 20

Calcium anr

Chromium 44.5 50 89.0 80-120 45.2 50 90.4 1.6 20

Cobalt anr

Copper anr

Gold

Iron anr

Lead 91.5 100 91.5 80-120 93.2 100 93.2 1.8 20

Lithium

Magnesium anr

Manganese anr

Molybdenum

Nickel 45.2 50 90.4 80-120 45.8 50 91.6 1.3 20

Palladium

Platinum

Potassium anr

Selenium 47.5 50 95.0 80-120 48.8 50 97.6 2.7 20

Silicon

Silver 17.8 20 89.0 80-120 18.2 20 91.0 2.2 20

Sodium anr

Sulfur

Strontium

Thallium 47.6 50 95.2 80-120 48.6 50 97.2 2.1 20

Tin

Titanium

Tungsten

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Methods: SW846 6010C
Units: mg/kg

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Methods: SW846 6010C
Units: mg/kg

Metal	ICS Result	Spikelot Result	QC Limits
Vanadium	97.5	102	95.6 78-123

Zinc	221	229	96.5 82-118
Zirconium			

Associated samples MP26648: MC47325-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

10.1.2 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Methods: SW846 6010C
Units: mg/kg

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Methods: SW846 6010C
Units: mg/kg

Metal	ICS Result	Spikelot Result	QC Limits
Aluminum	anr		

Antimony	67.1	86.5	77.6 1-199
Arsenic	80.5	97.5	82.6 78-122

Barium	260	306	85.0 83-117
Beryllium	86.4	100	86.4 83-118

Bismuth

Boron

Cadmium	71.5	76.6	93.3 82-118
Calcium	anr		

Chromium	88.4	103	85.8 80-121
Cobalt	anr		

Copper

Gold

Iron

Lead	81.2	96.7	84.0 82-118
Lithium			

Magnesium

Manganese

Molybdenum

Nickel	135	153	88.2 82-118
Palladium			

Platinum

Potassium

Selenium	145	161	90.1 78-123
Silicon			

Silver

Sodium

Sulfur

Strontium	42.2	49.3	85.6 73-125
Thallium	108	119	90.8 79-121

Tin

Titanium

Tungsten

SERIAL DILUTION RESULTS SUMMARY

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Methods: SW846 6010C
Units: ug/l

Metal	MC47344-1 Original	SDL 1:5	%DIF	QC Limits
Vanadium	214	227	6.3	0-10
Zinc	349	383	9.6	0-10
Zirconium				

Associated samples MP26648: MC47325-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

10.1.3 10

SERIAL DILUTION RESULTS SUMMARY

QC Batch ID: MP26648
Matrix Type: SOLID
Prep Date: 08/18/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Methods: SW846 6010C
Units: ug/l

Metal	MC47344-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	0.00	0.00	NC	0-10
Arsenic	41.7	44.7	7.2	0-10
Barium	870	897	3.0	0-10
Beryllium	2.70	3.30	22.2 (a)	0-10
Bismuth				
Boron				
Cadmium	1.80	1.50	16.7 (a)	0-10
Calcium	anr			
Chromium	142	151	6.8	0-10
Cobalt	anr			
Copper	anr			
Gold				
Iron	anr			
Lead	42.3	41.8	1.2	0-10
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	98.4	102	3.6	0-10
Palladium				
Platinum				
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	1.00	0.00	100.0 (a)	0-10
Sodium	anr			
Sulfur				
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				

POST DICESTATF SPIKE SUMMARY

Login Number: MC47325
 Account: ENVTRAC - EnviroTrac
 Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
 Batch ID: MF6648
 Matrix Type: SOLID
 Method: SW846 6010C
 Units: ug/l

Prep Date: 08/18/16

	Sample	Final	MC47344-1	PS	Spike	Spike	Spike	QC
	ml	ml	Raw	Corr.**	ug/ml	ug/ml	ug/l	Rec Limits
Metabolite								

Vanadium

2.2.2

222. (1116).

Associated sample MF26648: MC47325-9

Results < LDL are shown as zero for calculation purposes

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26651
Matrix Type: SOLID
Prep Date: 08/19/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Methods: SW846 7471B
Units: mg/kg

Metal	BSP Result	SpikeLot HGRWSL	% Rec	QC Limits	BSD Result	SpikeLot HGRWSL	% Rec	BSD RPD	QC Limit
-------	------------	-----------------	-------	-----------	------------	-----------------	-------	---------	----------

Mercury 0.52 0.5 104.0 80-120 0.50 0.5 100.0 3.9 20

Associated samples MP26651: MC47325-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

10.2.2 10

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

QC Batch ID: MP26651
Matrix Type: SOLID
Prep Date: 08/19/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Methods: SW846 7471B
Units: mg/kg

Metal	RL	IDL	MDL	MR raw	final
-------	----	-----	-----	--------	-------

Mercury 0.033 0.058 .0057 -0.0028 <0.033

Associated samples MP26651: MC47325-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

10.2.1 10

Section 11

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

Logfile Number: MC47325
Account: ENVTRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
QC Batch ID: MF26651
Matrix Type: SOLID
Methods: SW846 7471b
Units: mg/kg
Prep Date: 08/19/16

Metal	LCS Result	Spikelet HGLCS86	% Rec	QC Limits
Mercury	20.2	20.2	100.0	71-129

Associated samples MP26651: MC47325-9
Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested



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09/15/16

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Technical Report for

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

03.990202.00

SGS Accutest Job Number: MC47325R

Sampling Date: 08/12/16

Report to:

EnviroTrac

denat@envirotrac.com

ATTN: Dena Tomassi

Total number of pages in report: 20



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791)
NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220)
DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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MC47325R



METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC47325
Account: ENVTRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP Recov	QC Limits
Cyanide Reactivity	GP20745/GN54578	1.5	0.0	mg/kg				
Specific Conductivity	GN54598	0.50	0.0	umhos/cm				
Sulfide Reactivity	GP20744/GN54560	50	0.0	mg/kg				

Associated Samples:
Batch GN54598: MC47325-9
Batch GP20744: MC47325-9
Batch GP20745: MC47325-9
(*) Outside of QC limits

11.1

11

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MC47325



Sample Summary

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

Project No: 03.990202.00

Job No: MC47325R

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
MC47325-9R	08/12/16	14:00 FM	08/16/16	SO Soil	STOCKPILE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sections:

123456

Section 1: Sample Summary

Section 2: Case Narrative/Conformance Summary

Section 3: Summary of Hubs

Section 4: Sample Results

4.1: MC47325-9R: STOCKPILE

Section 5: Misc. Forms

5.1: Chain of Custody

5.2: MCP Form

5.3: Sample Tracking Chronicle

5.4: QC Evaluation: MA MCP Limits

Section 6: Metals Analysis - QC Data Summaries

6.1: Prep QC MP26759: Pb

3

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14

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Summary of Hits

Job Number: MC47325R
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

Lab Sample ID	Client Sample ID	Result/Qual	RL	MDL	Units	Method
---------------	------------------	-------------	----	-----	-------	--------

MC47325-9R STOCKPILE

Lead 0.55 0.010 mg/l SW846 6010C

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EnviroTrac Job No MC47325R
Site: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA Report Date 9/15/2016 1:28:20 PM

1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/12/2016 and were received at SGS Accutest New England on 08/16/2016 properly preserved, at 2.6 Deg. C and intact. These Samples received a job number of MC47325R. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method SW846 6010C

Matrix: LEACHATE	Batch ID: MP26759
------------------	-------------------

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC47741-1ASDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Lead are outside control limits for sample MP26759-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only Lead requested.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC47325R).

Report of Analysis

Client Sample ID:	STOCKPILE	Date Sampled:	08/12/16
Lab Sample ID:	MC47325-9R	Date Received:	08/16/16
Matrix:	SO - Soil	Percent Solids:	90.9
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	IIW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.55	D008	5.0	0.010	mg/l	1	09/14/16	09/14/16	EAL	SW846 6010C ¹ SW846 3010A ²

(1) Instrument QC Batch: MA19457

(2) Prep QC Batch: MP26759

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)




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New England

Section 4

4

Sample Results

Report of Analysis



Massachusetts Department
of Environmental Protection
Bureau of Waste Site Cleanup

WSC-CAM
July 1, 2010
Final

Exhibit VII A
Revision No. 1

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name: Accutest Laboratories of New England

Project #: MC47325R

Project Location: Maggiore Somerville, 343 - 351 Summer Street,
Somerville, MA

MADEP RTN None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC47325-9R

Matrices: Groundwater/Surface Water () Soil/Sediment () Drinking Water () Air () Other (X)

CAM Protocol (check all that apply below):

8260 VOC ()	7470/7471 Hg ()	MassDEP VPH ()	8081 Pesticides ()	7196 Hex Cr ()	Mass DEP APH ()
CAM IIA	CAM III B	CAM IV A	CAM V B	CAM VI B	CAM IX A
8270 SVOC ()	7010 Metals ()	MassDEP EPH ()	8151 Herbicides ()	8330 Explosives ()	TO-15 VOC ()
CAM IIB	CAM III C	CAM IV B	CAM V C	CAM VII A	CAM IX B
6010 Metals (X)	6020 Metals ()	8082 PCB ()	9014 Total ()	6860 Perchlorate ()	
CAM III A	CAM III D	CAM V A	Cyanide/PAC ()	CAM VIII B	
		CAM VI A			

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty" status

A Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? Yes No

B Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? Yes No

C Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? Yes No

D Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? Yes No

E a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).
b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? Yes No
Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? Yes No

F Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols? Yes No

H Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.
Were all QC performance standards specified in the CAM protocol(s) achieved? Yes No

I Were results reported for the complete analyte list specified in the selected CAM protocol(s)? Yes No

All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: H. (Brad) Madadian

Position: Laboratory Director

Printed Name: H. (Brad) Madadian

Date: 15-Sep-16

5.1

5

ACCUTEST
LABORATORIES

Telephone Contact Report

Client Name: Craig Blake

Company: Envirotrac

Phone: 781-793-0074

Address: _____

Date: 9/13/2016

Time: 16:45

Other: MC47325R

Notes: Client would like to add TCLP PB to MC47325-9. They would like it logged in for the fastest TAT we can deliver on. After consulting with Metals dept, we can have results by COB Thursday 9/15/2016.

Initial / Date
RS 9/13/2016

MC47325R: Chain of Custody
Page 2 of 2

SGS

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ACCUTEST
MC47325R

SGS

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MC47325R

QC Evaluation: MA MCP Limits

Job Number: MC47325R
Account: EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Units	Limits
--------------	------	---------	-------------	-------------	-------	--------

No Exceptions found.



SGS Accutest

Internal Sample Tracking Chronicle

EnviroTrac
Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00
Job No: MC47325R

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
---------------	--------	----------	----	---------	----	------------

MC47325-9F Collected: 12-AUG-16 14:00 By: FM Received: 16-AUG-16 By: NT
STOCKPILE

MC47325-9FW846 6010C 14-SEP-16 18:20 EAL 14-SEP-16 EM EPB

* Sample used for QC is not from job MC47325R



ACCUTEST
New England

Section 6

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

QC Batch ID: MF26759
Matrix Type: LEADHATE

Units: mg/l

Prep Date: 09/14/16

Method	RL	IDL	NCL	MR Raw	Final
Aluminum	0.20	.011	.025		
Antimony	0.0060	.0013	.0012		
Arsenic	0.010	.0015	.002		
Barium	0.50	.00019	.00057		
Beryllium	0.0040	.00016	.00034		
Bismuth	0.050	.00035	.0018		
Boron	0.10	.0097	.0023		
Cadmium	0.0040	.00019	.0003		
Calcium	5.0	.0076	.018		
Chromium	0.010	.00039	.0011		
Cobalt	0.050	.00021	.00041		
Copper	0.025	.00055	.0042		
Gold	0.050	.00091	.0013		
Iron	0.10	.0019	.016		
Lead	0.010	.0011	.0011	-0.00030	<0.010
Lithium	0.50	.0013	.0018		
Magnesium	5.0	.025	.056		
Manganese	0.015	.00011	.00041		
Molybdenum	0.10	.00017	.016		
Nickel	0.040	.00033	.00035		
Palladium	0.050	.0019	.0014		
Platinum	0.050	.0031	.0047		
Potassium	5.0	.027	.078		
Selenium	0.025	.0018	.0034		
Silicon	0.10	.0063	.03		
Silver	0.0050	.00027	.0014		
Sodium	5.0	.0051	.035		
Sulfur	0.050	.0022	.0033		
Strontium	0.010	.000039	.00017		
Thallium	0.0050	.0013	.0018		
Tin	0.10	.0008	.0022		
Titanium	0.050	.00032	.00099		
Tungsten	0.10	.0033	.023		

6.1.1

6

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SPINE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26759
Matrix Type: LEACHATE
Prep Date: 09/14/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC47325R
Account: ENVTRAC - EnviroTrac
Methods: SW846 6010C
Units: mg/l

Metal	BSP		Spikelot		QC		Spikelot		BSD		QC	
	Result	MPICP7	% Rec	Limit	Result	MPICP7	% Rec	Limit	RPD	RPD	Limit	Limit
Aluminum												
Antimony												
Arsenic	anr											
Barium	anr											
Beryllium												
Bismuth												
Boron												
Cadmium	anr											
Calcium												
Chromium	anr											
Cobalt												
Copper												
Gold												
Iron												
Lead	1.0	1.0	100.0	80-120	1.0	1.0	100.0	0.0	0.0	0.0	20	
Lithium												
Magnesium												
Manganese												
Molybdenum												
Nickel												
Palladium												
Platinum												
Potassium												
Selenium	anr											
Silicon												
Silver	anr											
Sodium												
Sulfur												
Strontium												
Thallium												
Tin												
Titanium												
Tungsten												

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

QC Batch ID: M26759
Matrix Type: LEACHATE
Prep Date: 09/14/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC47325R
Account: ENVTRAC - EnviroTrac
Methods: SW846 6010C
Units: mg/l

Metal	RL	IDL	MDL	MR	
				raw	final
Vanadium	0.010	.00037	.0004		
Zinc	0.10	.0012	.001		
Zirconium	0.050	.00032	.0026		
Associated samples MP26759: MC47325-9R					
Results < IDL are shown as zero for calculation purposes					
(*) Outside of QC limits					
(anr) Analyte not requested					

SERIAL DILUTION RESULTS SUMMARY

QC Batch ID: ME26759
Matrix Type: LEACHATE
Prep Date: 09/14/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Account: ENVTRAC - EnviroTrac
Login Number: MC47325R
Methods: SW846 6010C
Units: ug/l

Metal	MC47741-1A Original SPL 1:5	10IF	QC Limits
Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Bismuth			
Boron			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Gold			
Iron			
Lead	1.10	0.00	100.0 (a) 0-10
Lithium			
Magnesium			
Manganese			
Molybdenum			
Nickel			
Palladium			
Platinum			
Potassium			
Selenium	anr		
Silicon			
Silver	anr		
Sodium			
Sulfur			
Strontium			
Tellurium			
Tin			
Titanium			
Tungsten			

6.1.3

6

SPIKE BLANK AND LAB CONTROL SAME AS COMBINE

QC Batch ID: ME26759
Matrix Type: LEACHATE
Prep Date: 09/14/16
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Account: ENVTRAC - EnviroTrac
Login Number: MC47325R
Methods: SW846 6010C
Units: mg/l

Metal	BSP Result	SpikeLot MEICP7	% Rec	QC Limits	BSD Result	SpikeLot MEICP7	% Rec	BSD RPD	QC Limit
Vanadium									
Zinc									
Zirconium									
Associated samples ME26759: MC47325-9R									
Results < IDL are shown as zero for calculation purposes (*) Outside of QC limits (anr) Analyte not requested									



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Technical Report for

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

03.990202.00

SGS Accutest Job Number: MC47407

Sampling Date: 08/17/16

Report to:

EnviroTrac

denat@envirotrac.com

ATTN: Dena Tomassi

Total number of pages in report: 126



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

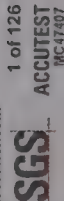
Client Service contact: Robert Soll 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579)
NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220)
DoD ELAP (L-A-B L2235)

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MC47407

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC47325R
Account: ENVIRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

QC Batch ID: MP26759
Matrix Type: LEACHATE
Methods: SW846 6010C
Units: ug/l

Prep Date: 09/14/16

Metal	MC47741-1A Original SDL 1:5	%DIF	QC Limits
-------	--------------------------------	------	--------------

Vanadium

Zinc

Zirconium

Associated samples MP26759: MC47325-9R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

6.1.3

6

20 of 20
ACCUTEST
MC47325R



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Sample Summary
(continued)

EnviroTrac
Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No: MC47407

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
MC47407-8	08/17/16	07:39	LMFM08/19/16	AQ Ground Water	MW-105
MC47407-8F	08/17/16	07:39	LMFM08/19/16	AQ Groundwater Filtered	MW-105
MC47407-9	08/17/16	07:31	LMFM08/19/16	AQ Ground Water	MW-106
MC47407-9F	08/17/16	07:31	LMFM08/19/16	AQ Groundwater Filtered	MW-106
MC47407-10	08/17/16	08:43	LMFM08/19/16	AQ Ground Water	MW-107
MC47407-10F	08/17/16	08:43	LMFM08/19/16	AQ Groundwater Filtered	MW-107

Sample Summary

EnviroTrac
Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No: MC47407

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
MC47407-1	08/17/16	11:49	LMFM08/19/16	AQ Ground Water	MW-1
MC47407-1F	08/17/16	11:49	LMFM08/19/16	AQ Groundwater Filtered	MW-1
MC47407-2	08/17/16	11:50	LMFM08/19/16	AQ Ground Water	MW-2
MC47407-2F	08/17/16	11:50	LMFM08/19/16	AQ Groundwater Filtered	MW-2
MC47407-3	08/17/16	09:58	LMFM08/19/16	AQ Ground Water	MW-3
MC47407-3F	08/17/16	09:58	LMFM08/19/16	AQ Groundwater Filtered	MW-3
MC47407-4	08/17/16	10:44	LMFM08/19/16	AQ Ground Water	MW-103
MC47407-4F	08/17/16	10:44	LMFM08/19/16	AQ Groundwater Filtered	MW-103
MC47407-5	08/17/16	10:40	LMFM08/19/16	AQ Ground Water	MW-108
MC47407-6	08/17/16	08:54	LMFM08/19/16	AQ Ground Water	B-2/MW
MC47407-6F	08/17/16	08:54	LMFM08/19/16	AQ Groundwater Filtered	B-2/MW
MC47407-7	08/17/16	09:41	LMFM08/19/16	AQ Ground Water	B-3/MW
MC47407-7F	08/17/16	09:41	LMFM08/19/16	AQ Groundwater Filtered	B-3/MW

Metals By Method SW846 7470A

Matrix: AQ	Batch ID: MP26670
------------	-------------------

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC47407).



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EnviroTrac Job No: MC47407

Site: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA Report Date 8/29/2016 11:42:24 A

10 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/17/2016 and were received at SGS Accutest New England on 08/19/2016 properly preserved, at 4.6 Deg. C and intact. These Samples received a job number of MC47407. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ	Batch ID: MSN3823
------------	-------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- The response factor (RF) for the 2-Butanone and Acetone low points (0.056 and 0.061) and average points (0.050 and 0.050) in the initial calibration MSN3802-ICC3802 are less than the required RF of 0.1 as noted in Table 4 of SW846 8260C.
- RPD(s) for MSN3823-BSD for 1,4-Dioxane are outside MCP criteria.
- MSN3823-BSD for Hexachlorobutadiene are outside MCP criteria.
- Continuing calibration check standard MSN3823-CC3802 for 1,4-dioxane exceed 40% Difference (response biased high). Associated samples are non-detect for this compound.
- Quadratic regression is employed for initial calibration standard MSN3802-ICC3802 for dichlorodifluoromethane.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix: AQ	Batch ID: GBH2374
------------	-------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix: AQ	Batch ID: OP48508
------------	-------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for OP48508-BSD for Pyrene are outside control limits. Target recovery satisfactory.

Metals By Method SW846 6010C

Matrix: AQ	Batch ID: MP26664
------------	-------------------

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC47407-1FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Barium, Nickel, Zinc are outside control limits for sample MP26664-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Summary of Hits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

MC47407-7 B-3/MW

No hits reported in this sample.

MC47407-7F B-3/MW

Arsenic 5.7 4.0 ug/l SW846 6010C

MC47407-8 MW-105

No hits reported in this sample.

MC47407-8F MW-105

Selenium 11.6 10 ug/l SW846 6010C
Zinc 26.1 20 ug/l SW846 6010C

MC47407-9 MW-106

No hits reported in this sample.

MC47407-9F MW-106

Arsenic 6.0 4.0 ug/l SW846 6010C

MC47407-10 MW-107

No hits reported in this sample.

MC47407-10F MW-107

Selenium 11.3 10 ug/l SW846 6010C

Summary of Hits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

MC47407-1 MW-1

No hits reported in this sample.

MC47407-1F MW-1

Arsenic 29.5 4.0 ug/l SW846 6010C

MC47407-2 MW-2

C19-C36 Aliphatics

362 110 ug/l MADEP EPH REV 1.1

MC47407-2F MW-2

Arsenic 4.4 4.0 ug/l SW846 6010C

MC47407-3 MW-3

No hits reported in this sample.

MC47407-3F MW-3

No hits reported in this sample.

MC47407-4 MW-103

Acetone 14.5 10 ug/l SW846 8260C

MC47407-4F MW-103

Arsenic 24.3 4.0 ug/l SW846 6010C

MC47407-5 MW-108

No hits reported in this sample.

MC47407-6 B-2/MW

No hits reported in this sample.

MC47407-6F B-2/MW

No hits reported in this sample.

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-1	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N104280.D	1	08/25/16	MC	n/a	n/a	MSN3823

Run #1	Purge Volume
Run #2	5.0 ml

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound



ACCUTEST
New England

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-1	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.1 4

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-129%
2037-26-5	Toluene-D8	98%		83-114%
460-00-4	4-Bromofluorobenzene	93%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-1	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.1 4

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-1	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15352.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	910 ml	2.0 ml

CAS No. Compound Result RL Units Q

83-32-9	Acenaphthene	ND	5.5	ug/l	
208-96-8	Acenaphthylene	ND	5.5	ug/l	
120-12-7	Anthracene	ND	5.5	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.5	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.5	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.5	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.5	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.5	ug/l	
218-01-9	Chrysene	ND	5.5	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.5	ug/l	
206-44-0	Fluoranthene	ND	5.5	ug/l	
86-73-7	Fluorene	ND	5.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.5	ug/l	
91-20-3	Naphthalene	ND	5.5	ug/l	
85-01-8	Phenanthrene	ND	5.5	ug/l	
129-00-0	Pyrene	ND	5.5	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		40-140%
321-60-8	2-Fluorobiphenyl	66%		40-140%
3386-33-2	1-Chlorooctadecane	84%		40-140%
580-13-2	2-Bromonaphthalene	65%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-1	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	BH39916.D	1	08/22/16	DF	n/a	n/a	GBH2374

Run #1	Purge Volume
Run #2	5.0 ml

MA-VPH List

CAS No. Compound Result RL Units Q

71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
	o-Xylene	ND	2.0	ug/l	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	83%		70-130%
	2,3,4-Trifluorotoluene	83%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-2	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N104281.D	1	08/25/16	MC	n/a	n/a	MSN3823
Run #2							

Run #1	Purge Volume
Run #2	5.0 ml

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-1F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Arsenic	29.5	4.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Mercury	< 0.20	0.20	ug/l	1	08/23/16	08/24/16	EAL SW846 7470A 1	SW846 7470A 4
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL SW846 6010C 2	SW846 3010A 3

(1) Instrument QC Batch: MA19404

(2) Instrument QC Batch: MA19405

(3) Prep QC Batch: MP26664

(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-2	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.3 4

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-129%
2037-26-5	Toluene-D8	99%		83-114%
460-00-4	4-Bromofluorobenzene	92%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-2	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.3 4

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
1330-20-7	o-Xylene	ND	1.0	ug/l	
	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-2	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1		
Project:	SW846 3510C Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15353.D	1	08/26/16	TA	08/22/16	OP48508	GDE856
Run #2							

Run #	Initial Volume	Final Volume
Run #1	900 ml	2.0 ml
Run #2		

CAS No. Compound Result RL Units Q

83-32-9	Acenaphthene	ND	5.6	ug/l	
208-96-8	Acenaphthylene	ND	5.6	ug/l	
120-12-7	Anthracene	ND	5.6	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	ug/l	
218-01-9	Chrysene	ND	5.6	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.6	ug/l	
206-44-0	Fluoranthene	ND	5.6	ug/l	
86-73-7	Fluorene	ND	5.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.6	ug/l	
91-20-3	Naphthalene	ND	5.6	ug/l	
85-01-8	Phenanthrene	ND	5.6	ug/l	
129-00-0	Pyrene	ND	5.6	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	362	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		40-140%
321-60-8	2-Fluorobiphenyl	67%		40-140%
3386-33-2	1-Chlorooctadecane	78%		40-140%
580-13-2	2-Bromonaphthalene	78%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-2	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH39917.D	1	08/22/16	DF	n/a	n/a	GBH2374
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
	o-Xylene	ND	2.0	ug/l	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	83%		70-130%
	2,3,4-Trifluorotoluene	83%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-3	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N104282.D	1	08/25/16	MC	n/a	n/a	MSN3823

Purge Volume
5.0 ml

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-2F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Arsenic	4.4	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Mercury	< 0.20	0.20	ug/l	1	08/23/16	08/24/16	EAL	SW846 7470A 4
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2

(1) Instrument QC Batch: MA19404
(2) Instrument QC Batch: MA19405
(3) Prep QC Batch: MP26664
(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-3	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.5 4

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-129%
2037-26-5	Toluene-ID8	98%		83-114%
460-00-4	4-Bromofluorobenzene	93%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-3	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.5 4

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-3	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15354.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	850 ml	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	5.9	ug/l	
208-96-8	Acenaphthylene	ND	5.9	ug/l	
120-12-7	Anthracene	ND	5.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.9	ug/l	
218-01-9	Chrysene	ND	5.9	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.9	ug/l	
206-44-0	Fluoranthene	ND	5.9	ug/l	
86-73-7	Fluorene	ND	5.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.9	ug/l	
91-20-3	Naphthalene	ND	5.9	ug/l	
85-01-8	Phenanthrene	ND	5.9	ug/l	
129-00-0	Pyrene	ND	5.9	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	120	ug/l	
	C9-C18 Aliphatics	ND	120	ug/l	
	C19-C36 Aliphatics	ND	120	ug/l	
	C11-C22 Aromatics	ND	120	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		40-140%
321-60-8	2-Fluorobiphenyl	75%		40-140%
3386-33-2	1-Chlorooctadecane	79%		40-140%
580-13-2	2-Bromonaphthalene	88%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-3	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	BH39918.D	1	08/22/16	DF	n/a	n/a	GBH2374

Run #1	Purge Volume
Run #2	5.0 ml

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	84%		70-130%
	2,3,4-Trifluorotoluene	84%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-4	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N104283.D	1	08/25/16	MC	n/a	n/a	MSN3823
Run #2							

Purge Volume
5.0 ml

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	14.5	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-3F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Arsenic	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Mercury	< 0.20	0.20	ug/l	1	08/23/16	08/24/16	EAL	SW846 7470A 4
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3

(1) Instrument QC Batch: MA19404

(2) Instrument QC Batch: MA19405

(3) Prep QC Batch: MP26664

(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-4	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-129%
2037-26-5	Toluene-D8	98%		83-114%
460-00-4	4-Bromofluorobenzene	94%		75-124%

4.7

4

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-4	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-4	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15355.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	820 ml	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	6.1	ug/l	
208-96-8	Acenaphthylene	ND	6.1	ug/l	
120-12-7	Anthracene	ND	6.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	6.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	6.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	6.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	6.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	6.1	ug/l	
218-01-9	Chrysene	ND	6.1	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	6.1	ug/l	
206-44-0	Fluoranthene	ND	6.1	ug/l	
86-73-7	Fluorene	ND	6.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	6.1	ug/l	
91-20-3	Naphthalene	ND	6.1	ug/l	
85-01-8	Phenanthrene	ND	6.1	ug/l	
129-00-0	Pyrene	ND	6.1	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	120	ug/l	
	C9-C18 Aliphatics	ND	120	ug/l	
	C19-C36 Aliphatics	ND	120	ug/l	
	C11-C22 Aromatics	ND	120	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		40-140%
321-60-8	2-Fluorobiphenyl	61%		40-140%
3386-33-2	1-Chlorooctadecane	76%		40-140%
580-13-2	2-Bromonaphthalene	60%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-4	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	BH39919.D	1	08/22/16	DF	n/a	n/a	GBH2374

Run #1	Purge Volume
Run #2	5.0 ml

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Teri Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aromatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	83%		70-130%
	2,3,4-Trifluorotoluene	83%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-108	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-5	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846.3510C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15356.D	1	08/26/16	TA	08/22/16	OP48508	GDE856
Run #2							

Run #	Initial Volume	Final Volume
Run #1	980 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	5.1	ug/l	
208-96-8	Acenaphthylene	ND	5.1	ug/l	
120-12-7	Anthracene	ND	5.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	ug/l	
218-01-9	Chrysene	ND	5.1	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.1	ug/l	
206-44-0	Fluoranthene	ND	5.1	ug/l	
86-73-7	Fluorene	ND	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/l	
91-20-3	Naphthalene	ND	5.1	ug/l	
85-01-8	Phenanthrene	ND	5.1	ug/l	
129-00-0	Pyrene	ND	5.1	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	ug/l	
	C9-C18 Aliphatics	ND	100	ug/l	
	C19-C36 Aliphatics	ND	100	ug/l	
	C11-C22 Aromatics	ND	100	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		40-140%
321-60-8	2-Fluorobiphenyl	68%		40-140%
3386-33-2	1-Chlorooctadecane	79%		40-140%
580-13-2	2-Bromonaphthalene	80%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-4F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Arsenic	24.3	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Mercury	< 0.20	0.20	ug/l	1	08/23/16	08/24/16	EAL	SW846 3010A 4
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3

(1) Instrument QC Batch: MA19404
(2) Instrument QC Batch: MA19405
(3) Prep QC Batch: MP26664
(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-2/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-6	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-6	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N104284.D	1	08/25/16	MC	n/a	n/a	MSN3823

Purge Volume

Run #1	5.0 ml
Run #2	

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-6F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Arsenic	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Mercury	< 0.20	0.20	ug/l	1	08/22/16	08/24/16	EAL	SW846 7470A 4
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3

- (1) Instrument QC Batch: MA19404
(2) Instrument QC Batch: MA19405
(3) Prep QC Batch: MP26664
(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-2/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-6	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1	SW846 3510C	
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15357.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	900 ml	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	5.6	ug/l	
208-96-8	Acenaphthylene	ND	5.6	ug/l	
120-12-7	Anthracene	ND	5.6	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	ug/l	
218-01-9	Chrysene	ND	5.6	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.6	ug/l	
206-44-0	Fluoranthene	ND	5.6	ug/l	
86-73-7	Fluorene	ND	5.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.6	ug/l	
91-20-3	Naphthalene	ND	5.6	ug/l	
85-01-8	Phenanthrene	ND	5.6	ug/l	
129-00-0	Pyrene	ND	5.6	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		40-140%
321-60-8	2-Fluorobiphenyl	69%		40-140%
3386-33-2	1-Chlorooctadecane	74%		40-140%
580-13-2	2-Bromonaphthalene	80%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-3/MW
Lab Sample ID: MC47407-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Date Sampled: 08/17/16
Date Received: 08/19/16
Percent Solids: n/a

4.12

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VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
1330-20-7	o-Xylene	ND	1.0	ug/l	
	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-3/MW
Lab Sample ID: MC47407-7
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Date Sampled: 08/17/16
Date Received: 08/19/16
Percent Solids: n/a

4.12

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Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N104285.D	1	08/25/16	MC	n/a	n/a	MSN3823

Purge Volume
5.0 ml

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-7	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH39921.D	1	08/22/16	DF	n/a	n/a	GBH2374
Run #2							

Run #1	Purge Volume	
Run #2	5.0 ml	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
	o-Xylene	ND	2.0	ug/l	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
	2,3,4-Trifluorotoluene	81%		70-130%	
	2,3,4-Trifluorotoluene	81%		70-130%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-7	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-129%
2037-26-5	Toluene-D8	98%		83-114%
460-00-4	4-Bromofluorobenzene	93%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-7F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Arsenic	5.7	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Mercury	< 0.20	0.20	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL	SW846 3010A 3

- (1) Instrument QC Batch: MA19404
(2) Instrument QC Batch: MA19405
(3) Prep QC Batch: MP26664
(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-3/MW	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-7	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15358.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	900 ml	2.0 ml

CAS No. Compound Result RL Units Q

83-32-9	Acenaphthene	ND	5.6	ug/l	
208-96-8	Acenaphthylene	ND	5.6	ug/l	
120-12-7	Anthracene	ND	5.6	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	ug/l	
218-01-9	Chrysene	ND	5.6	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.6	ug/l	
206-44-0	Fluoranthene	ND	5.6	ug/l	
86-73-7	Fluorene	ND	5.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.6	ug/l	
91-20-3	Naphthalene	ND	5.6	ug/l	
85-01-8	Phenanthrene	ND	5.6	ug/l	
129-00-0	Pyrene	ND	5.6	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		40-140%
321-60-8	2-Fluorobiphenyl	76%		40-140%
3386-33-2	1-Chlorooctadecane	76%		40-140%
580-13-2	2-Bromonaphthalene	89%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-105
Lab Sample ID: MC47407-8
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Date Sampled: 08/17/16
Date Received: 08/19/16
Percent Solids: n/a

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VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
1330-20-7	o-Xylene	ND	1.0	ug/l	
	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-105
Lab Sample ID: MC47407-8
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Date Sampled: 08/17/16
Date Received: 08/19/16
Percent Solids: n/a

4.14 4

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N104286.D	1	08/25/16	MC	n/a	n/a	MSN3823
Run #2							

Purge Volume
Run #1 5.0 ml
Run #2

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-105	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-8	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH39922.D	1	DF	n/a	n/a	GBH2374
Run #2						

Purge Volume	
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
	o-Xylene	ND	2.0	ug/l	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	81%		70-130%
	2,3,4-Trifluorotoluene	82%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-105	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-8	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-129%
2037-26-5	Toluene-D8	97%		83-114%
460-00-4	4-Bromofluorobenzene	94%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-105	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-8F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.15 4

Dissolved Metals Analysis						
Analyte	Result	RL	Units	DF	Prep	Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	SW846 6010C 2
Arsenic	< 4.0	4.0	ug/l	1	08/22/16	SW846 6010C 2
Barium	< 50	50	ug/l	1	08/22/16	SW846 6010C 2
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	SW846 6010C 2
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	SW846 6010C 2
Chromium	< 10	10	ug/l	1	08/22/16	SW846 6010C 2
Lead	< 5.0	5.0	ug/l	1	08/22/16	SW846 6010C 2
Mercury	< 0.20	0.20	ug/l	1	08/23/16	SW846 7470A 1
Nickel	< 40	40	ug/l	1	08/22/16	SW846 6010C 2
Selenium	11.6	10	ug/l	1	08/22/16	SW846 6010C 2
Silver	< 5.0	5.0	ug/l	1	08/22/16	SW846 6010C 2
Thallium	< 5.0	5.0	ug/l	1	08/22/16	SW846 6010C 2
Vanadium	< 10	10	ug/l	1	08/22/16	SW846 6010C 2
Zinc	26.1	20	ug/l	1	08/22/16	SW846 6010C 2

- (1) Instrument QC Batch: MA19404
(2) Instrument QC Batch: MA19405
(3) Prep QC Batch: MP26664
(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-105	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-8	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1	SW846 3510C	
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.14 4

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15360.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	890 ml	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	5.6	ug/l	
208-96-8	Acenaphthylene	ND	5.6	ug/l	
120-12-7	Anthracene	ND	5.6	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	ug/l	
218-01-9	Chrysene	ND	5.6	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.6	ug/l	
206-44-0	Fluoranthene	ND	5.6	ug/l	
86-73-7	Fluorene	ND	5.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.6	ug/l	
91-20-3	Naphthalene	ND	5.6	ug/l	
85-01-8	Phenanthrene	ND	5.6	ug/l	
129-00-0	Pyrene	ND	5.6	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	72%		40-140%	
321-60-8	2-Fluorebiphenyl	70%		40-140%	
3386-33-2	1-Chlorooctadecane	69%		40-140%	
580-13-2	2-Bromonaphthalene	83%		40-140%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	MW-106	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-9	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropane	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-106	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-9	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N104287.D	1	08/25/16	MC	n/a	n/a	MSN3823

Purge Volume	5.0 ml
Run #1	
Run #2	

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-106	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-9F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Arsenic	6.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Barium	< 50	50	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Beryllium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Cadmium	< 4.0	4.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Chromium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Lead	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Mercury	< 0.20	0.20	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Nickel	< 40	40	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Selenium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Silver	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Thallium	< 5.0	5.0	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Vanadium	< 10	10	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2
Zinc	< 20	20	ug/l	1	08/22/16	08/24/16	EAL	SW846 6010C 2

- (1) Instrument QC Batch: MA19404
(2) Instrument QC Batch: MA19405
(3) Prep QC Batch: MP26664
(4) Prep QC Batch: MP26670

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-106	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-9	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	DE15361.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

Run #1	Initial Volume	Final Volume
Run #2	860 ml	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	5.8	ug/l	
208-96-8	Acenaphthylene	ND	5.8	ug/l	
120-12-7	Anthracene	ND	5.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.8	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.8	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.8	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.8	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.8	ug/l	
218-01-9	Chrysene	ND	5.8	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.8	ug/l	
206-44-0	Fluoranthene	ND	5.8	ug/l	
86-73-7	Fluorene	ND	5.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.8	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.8	ug/l	
91-20-3	Naphthalene	ND	5.8	ug/l	
85-01-8	Phenanthrene	ND	5.8	ug/l	
129-00-0	Pyrene	ND	5.8	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	120	ug/l	
	C9-C18 Aliphatics	ND	120	ug/l	
	C19-C36 Aliphatics	ND	120	ug/l	
	C11-C22 Aromatics	ND	120	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		40-140%
321-60-8	2-Fluorobiphenyl	70%		40-140%
3386-33-2	1-Chlorooctadecane	80%		40-140%
580-13-2	2-Bromonaphthalene	81%		40-140%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-107
Lab Sample ID: MC47407-10
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Date Sampled: 08/17/16
Date Received: 08/19/16
Percent Solids: n/a

4.18 4

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
1330-20-7	o-Xylene	ND	1.0	ug/l	
	Xylene (total)	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-107
Lab Sample ID: MC47407-10
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Date Sampled: 08/17/16
Date Received: 08/19/16
Percent Solids: n/a

4.18 4

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N104288.D	1	08/25/16	MC	n/a	n/a	MSN3823

Purge Volume
Run #1 5.0 ml
Run #2

VOA MCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoforn	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-107	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-10	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP VPH REV 1.1		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH39924.D	1	08/22/16	DF	n/a	n/a	GBH2374
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	82%		70-130%
	2,3,4-Trifluorotoluene	82%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-107	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-10	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Magglore Somerville, 343 - 351 Summer Street, Somerville, MA		

VOA MCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-129%
2037-26-5	Toluene-D8	99%		83-114%
460-00-4	4-Bromofluorobenzene	94%		75-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-107	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-10F	Date Received:	08/19/16
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

4.18 4

Report of Analysis

Client Sample ID:	MW-107	Date Sampled:	08/17/16
Lab Sample ID:	MC47407-10	Date Received:	08/19/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP EPH REV 1.1 SW846 3510C		
Project:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA		

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DE15362.D	1	TA	08/22/16	OP48508	GDE856
Run #2						

Initial Volume	Final Volume
Run #1	800 ml
Run #2	2.0 ml

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	6.3	ug/l	
208-96-8	Acenaphthylene	ND	6.3	ug/l	
120-12-7	Anthracene	ND	6.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	6.3	ug/l	
50-32-8	Benzo(a)pyrene	ND	6.3	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	6.3	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	6.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	6.3	ug/l	
218-01-9	Chrysene	ND	6.3	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	6.3	ug/l	
206-44-0	Fluoranthene	ND	6.3	ug/l	
86-73-7	Fluorene	ND	6.3	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	6.3	ug/l	
91-20-3	Naphthalene	ND	6.3	ug/l	
85-01-8	Phenanthrene	ND	6.3	ug/l	
129-00-0	Pyrene	ND	6.3	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	130	ug/l	
	C9-C18 Aliphatics	ND	130	ug/l	
	C19-C36 Aliphatics	ND	130	ug/l	
	C11-C22 Aromatics	ND	130	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		40-140%
321-60-8	2-Fluorobiphenyl	77%		40-140%
3386-33-2	1-Chlorooctadecane	81%		40-140%
580-13-2	2-Bromonaphthalene	91%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

[illegible]

MC47407: Chain of Custody
Page 1 of 3

Sample Receipt Summary - Problem Resolution

Job Number: MC47407 Response Date 8/23/2018

CSR: Rob Soli

Response: Client confirmed that sample "B-2MMW" collected at 08:54 should be logged as sample -8
Client confirmed that sample "B-3MMW" collected at 09:41 should be logged as sample -7
see email in file

SGS Accutest Sample Receipt Summary

Job Number: MC47407 Client: ENVIOTRAC Project: MAGGIORE SOMERVILLE

Date / Time Received: 8/19/2016 3:16:00 PM Delivery Method: SGS Courier Airbill #s:

Cooler Temps (Initial/Adjusted): #1: (4.6/4.6), #1: (3.5/3.5).

Cooler Security	<u>Y</u>	<u>or</u>	<u>N</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	4. Smp'l Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature	<u>Y</u>	<u>or</u>	<u>N</u>			
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
2. Cooler temp verification:	IRGUN1					
3. Cooler media:	Ice (Bag)					
4. No. Coolers:	1					
Quality Control Preservation	<u>Y</u>	<u>or</u>	<u>N</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
4. VOCs headspace free:	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

Sample Integrity - Documentation	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Sample Integrity - Condition	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample rec'd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		
Sample Integrity - Instructions	<u>Y</u>	<u>or</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Bottles received for unspecified tests:	<input type="checkbox"/>		<input checked="" type="checkbox"/>
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
4. Compositing instructions clear:	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments

-6 Received two sets of sample volume labeled "B-2MMW" one with collection time 08:54 per COC, the other with 09:41.
-7 No volume received with ID "B-3MMW", and with a collection time of 09:41.

Samples were labeled by SGS per collection time:
"B-2MMW" collected 08:54 labeled as MC47407-6
"B-3MMW" collected 09:41 labeled as MC47407-7

MADEP EPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/> Broken <input type="checkbox"/> Leaking <input type="checkbox"/>
Aqueous Preservative	N/A <input checked="" type="checkbox"/> pH <= 2 <input checked="" type="checkbox"/> pH > 2 <input type="checkbox"/>
Temperature	Received on Ice <input type="checkbox"/> Received at 4 Deg. C <input type="checkbox"/> Other <input checked="" type="checkbox"/> Rec'd at 4.6 Deg. C
Extraction Method	SW846 3510C
Method for Ranges:	MADEP EPH REV 1.1
Method for Targets:	MADEP EPH REV 1.1
EPH Surrogate Sds	Alphab. 1-Chlorooctadecane
EPH Fractionation	Aromatic: o-Terphenyl
Surrogate Standards:	2-Fluorobiphenyl
	2-Bromonaphthalene
Unadjusted Ranges	CAS #
C11-C22 Aromatics (Unadj.)	Units ug/l
Diesel PAH Analytes	Result ND ^a RDL ^a 110
2-Methylnaphthalene	91-57-6 ug/l 5.5
Phenanthrene	85-01-8 ug/l 5.5
Acenaphthene	83-32-9 ug/l 5.5
Naphthalene	91-20-3 ug/l 5.5
Other Target PAH Analytes	
Acenaphthylene	208-96-8 ug/l 5.5
Anthracene	120-12-7 ug/l 5.5
Benzof(a)anthracene	56-55-3 ug/l 5.5
Benzof(a)pyrene	50-32-8 ug/l 5.5
Benzof(b)fluoranthene	205-99-2 ug/l 5.5
Benzof(g,h,i)perylene	191-24-2 ug/l 5.5
Benzof(k)fluoranthene	207-08-9 ug/l 5.5
Chrysene	218-01-9 ug/l 5.5
Dibenz(a,h)anthracene	53-70-3 ug/l 5.5
Fluoranthene	206-44-0 ug/l 5.5
Fluorene	86-73-7 ug/l 5.5
Indeno(1,2,3-cd)pyrene	193-39-5 ug/l 5.5
Pyrene	129-00-0 ug/l 5.5
Adjusted Ranges	
C9-C18 Aliphatics	ug/l ND ^a 110
C19-C36 Aliphatics	ug/l ND ^a 110
C11-C22 Aromatics	ug/l ND ^a 110
Surrogate Recoveries	Acceptance Range
1-Chlorooctadecane	% 84 40-140 %
o-Terphenyl	% 69 40-140 %
2-Fluorobiphenyl	% 66 40-140 %
2-Bromonaphthalene	% 65 40-140 %
Footnotes	
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	
D A "J" qualifier indicates an estimated value	

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No-Details Attached


Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached

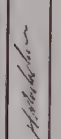
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is to the best of my knowledge and belief, accurate and complete.

Signature  Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016

	Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM July 1, 2010 Final	Exhibit VII A Revision No. 1
Exhibit VII A-2: MassDEP Analytical Protocol Certification Form			

MassDEP Analytical Protocol Certification Form					
Laboratory Name	Accutest Laboratories of New England	Project #	MC47407		
Project Location:	Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA	MADEP RTN	None		
This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s) MC47407-1, MC47407-10, MC47407-10F, MC47407-1F, MC47407-2, MC47407-2F, MC47407-3 MC47407-3F, MC47407-4, MC47407-4F, MC47407-5, MC47407-6, MC47407-6F, MC47407-7 MC47407-7F, MC47407-7F, MC47407-7F					
Matrices:	Groundwater/Surface Water (X)	Soil/Sediment ()	Drinking Water ()	Air ()	Other ()
CAM Protocol (check all that apply below)					
8260 VOC (X)	7470/7471 Hg (X)	MassDEP VPH (X)	8081 Pesticides ()	7196 Hex Cr ()	Mass DEP APH ()
CAM IIA	CAM III B	CAM IV A	CAM V B	CAM VI B	CAM IX A
8270 SVOC ()	7010 Metals ()	MassDEP EPH (X)	8151 Herbicides ()	8330 Explosives ()	TO-15 VOC ()
CAM IIB	CAM III C	CAM IV B	CAM V C	CAM VIII A	CAM IX B
6010 Metals (X)	6020 Metals ()	8082 PCB ()	9014 Total Cyanide/PAC ()	6860 Perchlorate ()	
CAM III A	CAM III D	CAM V A	CAM VI A	CAM VIII B	
Affirmative Responses to Questions A Through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
E	VPH, EPH, APH, and TO-15 only a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Responses to questions G, H, and I below is required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
All Negative responses must be addressed in an attached Environmental Laboratory case narrative.					
I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					
Signature			Position	Laboratory Director	
Printed Name:	H. (Brad) Madadian		Date:	29-Aug-16	

MADEP EPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/>	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input type="checkbox"/>	pH <= 2 <input checked="" type="checkbox"/>	pH > 2 <input type="checkbox"/>	Rec'd at 4.6 Deg C
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	
Extraction Method	SW846 3510C			
Method for Ranges	MADEP EPH REV 1.1			
Method for Targets	MADEP EPH REV 1.1			
EPH Surrogate Sids	Aliphatic: 1-Chlorooctadecane Aromatic: o-Terphenyl			
EPH Fractionation	2-Fluorobiphenyl			
Surrogate Standards	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/l	ND ^A	110
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	ug/l	ND	56
Phenanthrene	85-01-8	ug/l	ND	56
Acenaphthene	83-32-9	ug/l	ND	56
Naphthalene	91-20-3	ug/l	ND	56
Other Target PAH Analytes				
Acenaphthylene	208-96-8	ug/l	ND	56
Anthracene	120-12-7	ug/l	ND	56
Benzo(a)anthracene	56-55-3	ug/l	ND	56
Benzo(a)pyrene	50-32-8	ug/l	ND	56
Benzo(b)fluoranthene	205-99-2	ug/l	ND	56
Benzo(g,h,i)perylene	191-24-2	ug/l	ND	56
Benzo(k)fluoranthene	207-08-9	ug/l	ND	56
Chrysene	218-01-9	ug/l	ND	56
Dibenz(a,h)anthracene	53-70-3	ug/l	ND	56
Fluoranthene	206-44-0	ug/l	ND	56
Fluorene	86-73-7	ug/l	ND	56
Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	ND	56
Pyrene	129-00-0	ug/l	ND	56
Adjusted Ranges				
C9-C18 Aliphatics		ug/l	ND ^A	110
C19-C36 Aliphatics		ug/l	ND ^A	110
C11-C22 Aromatics		ug/l	ND ^C	110
Surrogate Recoveries		%	Acceptance Range	
1-Chlorooctadecane		%	76	40-140 %
o-Terphenyl		%	77	40-140 %
2-Fluorobiphenyl		%	76	40-140 %
2-Bromonaphthalene		%	89	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes			
Z	A "J" qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016



MADEP EPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/>	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservative	N/A <input type="checkbox"/>	pH <= 2 <input checked="" type="checkbox"/>	pH > 2 <input type="checkbox"/>	Rec'd at 4.6 Deg C
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	
Extraction Method	SW846 3510C			
Method for Ranges	MADEP EPH REV 1.1			
Method for Targets	MADEP EPH REV 1.1			
EPH Surrogate Sids	Aliphatic: 1-Chlorooctadecane Aromatic: o-Terphenyl			
EPH Fractionation	2-Fluorobiphenyl			
Surrogate Standards	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/l	ND ^A	110
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	ug/l	ND	56
Phenanthrene	85-01-8	ug/l	ND	56
Acenaphthene	83-32-9	ug/l	ND	56
Naphthalene	91-20-3	ug/l	ND	56
Other Target PAH Analytes				
Acenaphthylene	208-96-8	ug/l	ND	56
Anthracene	120-12-7	ug/l	ND	56
Benzo(a)anthracene	56-55-3	ug/l	ND	56
Benzo(a)pyrene	50-32-8	ug/l	ND	56
Benzo(b)fluoranthene	205-99-2	ug/l	ND	56
Benzo(g,h,i)perylene	191-24-2	ug/l	ND	56
Benzo(k)fluoranthene	207-08-9	ug/l	ND	56
Chrysene	218-01-9	ug/l	ND	56
Dibenz(a,h)anthracene	53-70-3	ug/l	ND	56
Fluoranthene	206-44-0	ug/l	ND	56
Fluorene	86-73-7	ug/l	ND	56
Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	ND	56
Pyrene	129-00-0	ug/l	ND	56
Adjusted Ranges				
C9-C18 Aliphatics		ug/l	ND ^A	110
C19-C36 Aliphatics		ug/l	ND ^A	110
C11-C22 Aromatics		ug/l	ND ^C	110
Surrogate Recoveries		%	Acceptance Range	
1-Chlorooctadecane		%	74	40-140 %
o-Terphenyl		%	76	40-140 %
2-Fluorobiphenyl		%	69	40-140 %
2-Bromonaphthalene		%	80	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes			
Z	A "J" qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016



MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 4.6 Deg. C
Extraction Method	SW846 3510C			
Method for Ranges	MADEP EPH REV 1.1	Client ID: MW-105	Lab ID: MC47407-9	
Method for Targets	MADEP EPH REV 1.1	Date Collected: 8/17/2016	Date Received: 8/19/2016	
EPH Surrogate Sids	Alphatic: 1-Chlorooctadecane	Date Extracted: 8/22/2016 10:00:00 PM	First Date Run: 8/26/2016	Last Date Run: N/A
EPH Fractionation	Aromatic: o-Terphenyl	% Solids: N/A	Low Dilution: 1	High Dilution: N/A
Surrogate Standards	2-Fluorobiphenyl			
Surrogate Standards	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/l	ND	120
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	ug/l	ND	58
Phenanthrene	85-01-8	ug/l	ND	58
Acenaphthene	83-32-9	ug/l	ND	58
Naphthalene	91-20-3	ug/l	ND	58
Other Target PAH Analytes				
Acenaphthylene	208-96-8	ug/l	ND	58
Anthracene	120-12-7	ug/l	ND	58
Benzo(a)anthracene	56-55-3	ug/l	ND	58
Benzo(a)pyrene	50-32-8	ug/l	ND	58
Benzo(b)fluoranthene	205-99-2	ug/l	ND	58
Benzo(g,h,i)perylene	191-24-2	ug/l	ND	58
Benzo(k)fluoranthene	207-08-9	ug/l	ND	58
Chrysene	218-01-9	ug/l	ND	58
Dibenz(a,h)anthracene	53-70-3	ug/l	ND	58
Fluoranthene	206-44-0	ug/l	ND	58
Fluorene	86-73-7	ug/l	ND	58
Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	ND	58
Pyrene	129-00-0	ug/l	ND	58
Adjusted Ranges				
C9-C18 Aliphatics		ug/l	ND	120
C19-C36 Aliphatics		ug/l	ND	120
C11-C22 Aromatics		ug/l	ND	120
Surrogate Recoveries		%		Acceptance Range
1-Chlorooctadecane		%	80	40-140 %
o-Terphenyl		%	70	40-140 %
2-Fluorobiphenyl		%	70	40-140 %
2-Bromonaphthalene		%	81	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons			
Z	A "J" qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No-Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature: H. (Brad) Madadian Position: Laboratory Director
Printed Name: H. (Brad) Madadian Date: 8/29/2016

MADEP EPH FORM

Matrix	Aqueous	Soil	Sediment	Other
Containers	Satisfactory	Broken	Leaking	
Aqueous Preservative	N/A	pH <= 2	pH > 2	
Temperature	Received on Ice	Received at 4 Deg. C	Other	Rec'd at 4.6 Deg. C
Extraction Method	SW846 3510C			
Method for Ranges	MADEP EPH REV 1.1	Client ID: MW-105	Lab ID: MC47407-8	
Method for Targets	MADEP EPH REV 1.1	Date Collected: 8/17/2016	Date Received: 8/19/2016	
EPH Surrogate Sids	Alphatic: 1-Chlorooctadecane	Date Extracted: 8/22/2016 10:00:00 PM	First Date Run: 8/26/2016	Last Date Run: N/A
EPH Fractionation	Aromatic: o-Terphenyl	% Solids: N/A	Low Dilution: 1	High Dilution: N/A
Surrogate Standards	2-Fluorobiphenyl			
Surrogate Standards	2-Bromonaphthalene			
Unadjusted Ranges	CAS #	Units	Result	RDL
C11-C22 Aromatics (Unadj.)		ug/l	ND	110
Diesel PAH Analytes				
2-Methylnaphthalene	91-57-6	ug/l	ND	56
Phenanthrene	85-01-8	ug/l	ND	56
Acenaphthene	83-32-9	ug/l	ND	56
Naphthalene	91-20-3	ug/l	ND	56
Other Target PAH Analytes				
Acenaphthylene	208-96-8	ug/l	ND	56
Anthracene	120-12-7	ug/l	ND	56
Benzo(a)anthracene	56-55-3	ug/l	ND	56
Benzo(a)pyrene	50-32-8	ug/l	ND	56
Benzo(b)fluoranthene	205-99-2	ug/l	ND	56
Benzo(g,h,i)perylene	191-24-2	ug/l	ND	56
Benzo(k)fluoranthene	207-08-9	ug/l	ND	56
Chrysene	218-01-9	ug/l	ND	56
Dibenz(a,h)anthracene	53-70-3	ug/l	ND	56
Fluoranthene	206-44-0	ug/l	ND	56
Fluorene	86-73-7	ug/l	ND	56
Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	ND	56
Pyrene	129-00-0	ug/l	ND	56
Adjusted Ranges				
C9-C18 Aliphatics		ug/l	ND	110
C19-C36 Aliphatics		ug/l	ND	110
C11-C22 Aromatics		ug/l	ND	110
Surrogate Recoveries		%		Acceptance Range
1-Chlorooctadecane		%	69	40-140 %
o-Terphenyl		%	72	40-140 %
2-Fluorobiphenyl		%	70	40-140 %
2-Bromonaphthalene		%	83	40-140 %
Footnotes				
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range			
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C11-C22 Aromatic Hydrocarbons			
Z	A "J" qualifier indicates an estimated value			

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No-Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature: H. (Brad) Madadian Position: Laboratory Director
Printed Name: H. (Brad) Madadian Date: 8/29/2016

MADEP VPH FORM

Matrix	Aqueous	✓	Soil	Sediment	Other
Containers	Satisfactory	✓	Broken	Leaking	
Aqueous Preservatives	N/A		pH <= 2	pH > 2	
Temperature	Received on Ice	✓	Received at 4 Deg. C	Other	✓
Methanol	N/A				
Method for Ranges	MADEP VPH REV 1.1		Client ID MW-1	Lab ID MC47407-1	
Method for Target Analytes	MADEP VPH REV 1.1		Date Collected 8/17/2016	Date Received 8/19/2016	
VPH Surrogate Standards			Date Extracted:	First Date Run:	Last Date Run:
PID	N/A		N/A	8/22/2016	N/A
FID	N/A		% Solids:	Low Dilution:	High Dilution:
	N/A		N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND ^A	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND ^A	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND ^A	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	

Adjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics		N/A	ug/l	ND ^B	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^C	50	

Surrogate Recoveries	Acceptance Range
FID 2,3,4-Trifluorotoluene	83
PID 2,3,4-Trifluorotoluene	83
Footnotes	
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range	C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons
Z A "J" qualifier indicates an estimated value	

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No-Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016



MADEP EPH FORM

Matrix	Aqueous	✓	Soil	Sediment	Other
Containers	Satisfactory	✓	Broken	Leaking	
Aqueous Preservative	N/A		pH <= 2	pH > 2	
Temperature	Received on Ice	✓	Received at 4 Deg. C	Other	✓
Extraction Method	SW846.3510C				
Method for Ranges	MADEP EPH REV 1.1		Client ID MW-107	Lab ID MC47407-10	
Method for Targets	MADEP EPH REV 1.1		Date Collected 8/17/2016	Date Received 8/19/2016	
EPH Surrogate Sds.	Aliphatic: 1-Chlorooctadecane		Date Extracted:	First Date Run:	Last Date Run:
	Aromatic: o-Terphenyl		8/22/2016 10:00:00 PM	8/26/2016	N/A
EPH Fractionation	2-Fluorobiphenyl		% Solids:	Low Dilution:	High Dilution:
Surrogate Standards	2-Bromonaphthalene		N/A	1	N/A

Unadjusted Ranges	CAS #	Units	Result	RDL	Q
C11-C22 Aromatics (Unadj.)		ug/l	ND ^A	130	
Diesel PAH Analytes					
2-Methylnaphthalene	91-57-6	ug/l	ND	63	
Phenanthrene	85-01-8	ug/l	ND	63	
Acenaphthene	83-32-9	ug/l	ND	63	
Naphthalene	91-20-3	ug/l	ND	63	
Other Target PAH Analytes					
Acenaphthylene	208-96-8	ug/l	ND	63	
Anthracene	120-12-7	ug/l	ND	63	
Benzo(a)anthracene	56-55-3	ug/l	ND	63	
Benzo(a)pyrene	50-32-8	ug/l	ND	63	
Benzo(b)fluoranthene	205-99-2	ug/l	ND	63	
Benzo(g,h,i)perylene	191-24-2	ug/l	ND	63	
Benzo(k)fluoranthene	207-08-9	ug/l	ND	63	
Chrysene	218-01-9	ug/l	ND	63	
Dibenz(a,h)anthracene	53-70-3	ug/l	ND	63	
Fluoranthene	206-44-0	ug/l	ND	63	
Fluorene	86-73-7	ug/l	ND	63	
Indeno(1,2,3-cd)pyrene	193-39-5	ug/l	ND	63	
Pyrene	129-00-0	ug/l	ND	63	

Adjusted Ranges	Units	Result	RDL	Q
C9-C18 Aliphatics	ug/l	ND ^A	130	
C19-C36 Aliphatics	ug/l	ND ^A	130	
C11-C22 Aromatics	ug/l	ND ^C	130	

Surrogate Recoveries	Acceptance Range
1-Chlorooctadecane	81
o-Terphenyl	80
2-Fluorobiphenyl	77
2-Bromonaphthalene	91

Footnotes
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
Z A "J" qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☒ Yes ☐ No-Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached

Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016



MADEP VPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/>	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A	pH <= 2 <input checked="" type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 4 6 Deg. C
Methanol	N/A			

Method for Ranges:	MADEP VPH REV 1.1	Client ID: MW-3	Lab ID: MC47407-3
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/17/2016	Date Received: 8/19/2016
VPH Surrogate Standards		Date Extracted:	First Date Run: 8/22/2016
PID:	N/A	% Solids:	Low Dilution: 1
FID:	N/A		High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	ug/l	ND ^a	50	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	ug/l	ND ^a	50	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	ug/l	ND ^a	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^a	50	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene			%	84	70-130 %
PID 2,3,4-Trifluorotoluene			%	84	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

C A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016

MADEP VPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/>	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>	
Aqueous Preservatives	N/A	pH <= 2 <input checked="" type="checkbox"/>	pH > 2 <input type="checkbox"/>	
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg. C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	Rec'd at 4 6 Deg. C
Methanol	N/A			

Method for Ranges:	MADEP VPH REV 1.1	Client ID: MW-2	Lab ID: MC47407-2
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/17/2016	Date Received: 8/19/2016
VPH Surrogate Standards		Date Extracted:	First Date Run: 8/22/2016
PID:	N/A	% Solids:	Low Dilution: 1
FID:	N/A		High Dilution: N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	ug/l	ND ^a	50	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	ug/l	ND ^a	50	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	ug/l	ND ^a	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^a	50	

Surrogate Recoveries					Acceptance Range
FID 2,3,4-Trifluorotoluene			%	83	70-130 %
PID 2,3,4-Trifluorotoluene			%	83	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range

C A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached

Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached

Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes- Details Attached

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director

Printed Name H. (Brad) Madadian Date 8/29/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other		
Containers	Satisfactory	Broken	Leaking			
Aqueous Preservatives	N/A	pH <= 2	pH > 2			
Temperature	Received on Ice	Received at 4 Deg C	Other	Rec'd at 4.6 Deg C		
Methanol	N/A					
Method for Ranges: MADEP VPH REV 1.1 Method for Target Analytes VPH Surrogate Standards		Client ID: B-2MW Date Collected 8/17/2016 Date Extracted: N/A % Solids: N/A First Date Run: 8/22/2016 Low Dilution: 1 Last Date Run: N/A High Dilution: N/A				
PID:						
FID:						
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RD _L	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	ug/l	ND ^A	50	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	ug/l	ND ^A	50	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	ug/l	ND ^A	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^A	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^A	50	
Surrogate Recoveries						
FID 2,3,4-Trifluorotoluene			%	83	70-130 %	
PID 2,3,4-Trifluorotoluene			%	83	70-130 %	
Footnotes						
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range						
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range						
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aromatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons						
Z A "J" qualifier indicates an estimated value						

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/29/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other		
Containers	Satisfactory	Broken	Leaking			
Aqueous Preservatives	N/A	pH <= 2	pH > 2			
Temperature	Received on Ice	Received at 4 Deg C	Other	Rec'd at 4.6 Deg C		
Methanol	N/A					
Method for Ranges: MADEP VPH REV 1.1 Method for Target Analytes VPH Surrogate Standards		Client ID: MW-103 Date Collected 8/17/2016 Date Extracted: N/A % Solids: N/A First Date Run: 8/22/2016 Low Dilution: 1 Last Date Run: N/A High Dilution: N/A				
PID:						
FID:						
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RD _L	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	ug/l	ND ^A	50	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	ug/l	ND ^A	50	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	ug/l	ND ^A	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^A	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^A	50	
Surrogate Recoveries						
FID 2,3,4-Trifluorotoluene			%	83	70-130 %	
PID 2,3,4-Trifluorotoluene			%	83	70-130 %	
Footnotes						
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range						
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range						
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range C9-C12 Aromatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons						
Z A "J" qualifier indicates an estimated value						

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No- Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No- Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/29/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other		
Containers	Satisfactory	Broken	Leaking			
Aqueous Preservatives	N/A	pH <= 2	pH > 2	Rec'd at 4.6 Deg. C		
Temperature	Received on Ice	Received at 4 Deg. C	Other			
Methanol	N/A					
Method for Ranges:	MADEP VPH REV 1.1	Client ID: MW-105	Lab ID: MC47407-8			
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/17/2016	Date Received: 8/19/2016			
VPH Surrogate Standards		Date Extracted: N/A	First Date Run: 8/22/2016	Last Date Run: N/A		
PID:		% Solids: N/A	Low Dilution: 1	High Dilution: N/A		
FID:						
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	ug/l	ND ^a	50	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	ug/l	ND ^a	50	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	ug/l	ND ^a	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^a	50	
Surrogate Recoveries					Acceptance Range	
FID 2,3,4-Trifluorotoluene			%	82	70-130 %	
PID 2,3,4-Trifluorotoluene			%	81	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
C	Concentration of Target Analytes eluting in that range					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
E	Concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons					
Z	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

Were all performance/acceptance standards for required QA/QC procedures achieved?

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature

Printed Name

H. (Brad) Madadian

Position

Date

Laboratory Director

8/29/2016

MADEP VPH FORM

Matrix	Aqueous	Soil	Sediment	Other		
Containers	Satisfactory	Broken	Leaking			
Aqueous Preservatives	N/A	pH <= 2	pH > 2	Rec'd at 4.6 Deg. C		
Temperature	Received on Ice	Received at 4 Deg. C	Other			
Methanol	N/A					
Method for Ranges:	MADEP VPH REV 1.1	Client ID: B-3/MW	Lab ID: MC47407-7			
Method for Target Analytes:	MADEP VPH REV 1.1	Date Collected: 8/17/2016	Date Received: 8/19/2016			
VPH Surrogate Standards		Date Extracted: N/A	First Date Run: 8/22/2016	Last Date Run: N/A		
PID:		% Solids: N/A	Low Dilution: 1	High Dilution: N/A		
FID:						
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)	100-41-4	C9-C12	ug/l	ND ^a	50	
C9- C10 Aromatics (Unadj.)	108-88-3	C5-C8	ug/l	ND ^a	50	
C9- C12 Aliphatics (Unadj.)	1634-04-4	C5-C8	ug/l	ND ^a	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^a	50	
Surrogate Recoveries					Acceptance Range	
FID 2,3,4-Trifluorotoluene			%	81	70-130 %	
PID 2,3,4-Trifluorotoluene			%	81	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
C	Concentration of Target Analytes eluting in that range					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
E	Concentration of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons					
Z	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed?

Were all performance/acceptance standards for required QA/QC procedures achieved?

Were any significant modifications made to the VPH method, as specified in Sect. 11.3?

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature

Printed Name

H. (Brad) Madadian

Position

Date

Laboratory Director

8/29/2016

MADEP VPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/>	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A	pH <= 2 <input checked="" type="checkbox"/>	pH > 2 <input type="checkbox"/>	Rec'd at 4.6 Deg C		
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>			
Methanol	N/A					
Method for Ranges: Method for Target Analytes: VPH Surrogate Standards	MADEP VPH REV 1.1 MADEP VPH REV 1.1	Client ID: MW-107 Date Collected: 8/17/2016	Lab ID: MC47407-10 Date Received: 8/19/2016			
PID:		Date Extracted: 8/22/2016	First Date Run: 8/22/2016	Last Date Run: N/A		
FID:		% Solids: N/A	Low Dilution: 1	High Dilution: N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND ^a	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND ^a	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^b	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^c	50	
Surrogate Recoveries						
FID 2,3,4-Trifluorotoluene			%	82	70-130 %	
PID 2,3,4-Trifluorotoluene			%	82	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
E	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
F	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
G	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
H	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
I	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
J	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No-Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/29/2016

MADEP VPH FORM

Matrix	Aqueous <input checked="" type="checkbox"/>	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Other <input type="checkbox"/>		
Containers	Satisfactory <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking <input type="checkbox"/>			
Aqueous Preservatives	N/A	pH <= 2 <input checked="" type="checkbox"/>	pH > 2 <input type="checkbox"/>	Rec'd at 4.6 Deg C		
Temperature	Received on Ice <input type="checkbox"/>	Received at 4 Deg C <input type="checkbox"/>	Other <input checked="" type="checkbox"/>			
Methanol	N/A					
Method for Ranges: Method for Target Analytes: VPH Surrogate Standards	MADEP VPH REV 1.1 MADEP VPH REV 1.1	Client ID: MW-106 Date Collected: 8/17/2016	Lab ID: MC47407-9 Date Received: 8/19/2016			
PID:		Date Extracted: 8/22/2016	First Date Run: 8/22/2016	Last Date Run: N/A		
FID:		% Solids: N/A	Low Dilution: 1	High Dilution: N/A		
Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND ^a	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND ^a	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	1	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND ^a	50	
C9- C12 Aliphatics		N/A	ug/l	ND ^b	50	
Surrogate Recoveries						
FID 2,3,4-Trifluorotoluene			%	83	70-130 %	
PID 2,3,4-Trifluorotoluene			%	82	70-130 %	
Footnotes						
A	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
B	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
C	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
D	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
E	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
F	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
G	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
H	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
I	Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range					
J	A "J" qualifier indicates an estimated value					

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☒ Yes ☐ No-Details Attached
Were all performance/acceptance standards for required QA/QC procedures achieved? ☒ Yes ☐ No-Details Attached
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☒ No ☐ Yes-Details Attached
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete

Signature H. (Brad) Madadian Position Laboratory Director
Printed Name H. (Brad) Madadian Date 8/29/2016

Internal Sample Tracking Chronicle

EnviroTrac

Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No: MC47407

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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MC47407-7 Collected: 17-AUG-16 09:41 By: LMFM Received: 19-AUG-16 By: NT
B-3/MW

MC47407-7 MADEP VPH REV 1.1 22-AUG-16 18:52 DF VMAVPH
MC47407-7 SW846 8260C 25-AUG-16 16:07 MC V8260MCP
MC47407-7 MADEP EPH REV 1.1 26-AUG-16 20:46 TA 22-AUG-16 AJ BMAEPH

MC47407-8 Collected: 17-AUG-16 07:39 By: LMFM Received: 19-AUG-16 By: NT
MW-105

MC47407-8 MADEP VPH REV 1.1 22-AUG-16 19:26 DF VMAVPH
MC47407-8 SW846 8260C 25-AUG-16 16:35 MC V8260MCP
MC47407-8 MADEP EPH REV 1.1 26-AUG-16 21:44 TA 22-AUG-16 AJ BMAEPH

MC47407-9 Collected: 17-AUG-16 07:31 By: LMFM Received: 19-AUG-16 By: NT
MW-106

MC47407-9 MADEP VPH REV 1.1 22-AUG-16 20:00 DF VMAVPH
MC47407-9 SW846 8260C 25-AUG-16 17:04 MC V8260MCP
MC47407-9 MADEP EPH REV 1.1 26-AUG-16 22:13 TA 22-AUG-16 AJ BMAEPH

MC47407-10 Collected: 17-AUG-16 08:43 By: LMFM Received: 19-AUG-16 By: NT
MW-107

MC47407-10 MADEP VPH REV 1.1 22-AUG-16 20:34 DF VMAVPH
MC47407-10 SW846 8260C 25-AUG-16 17:33 MC V8260MCP
MC47407-10 MADEP EPH REV 1.1 26-AUG-16 22:42 TA 22-AUG-16 AJ BMAEPH

MC47407-11 Collected: 17-AUG-16 11:49 By: LMFM Received: 19-AUG-16 By: NT
MW-1

MC47407-11 SW846 6010C 24-AUG-16 14:05 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,
SE,TL,V,ZN

MC47407-11 SW846 7470A 24-AUG-16 15:11 EAL 23-AUG-16 EM HG

MC47407-21 Collected: 17-AUG-16 11:50 By: LMFM Received: 19-AUG-16 By: NT
MW-2

MC47407-21 SW846 7470A 24-AUG-16 14:43 EAL 23-AUG-16 EM HG

Internal Sample Tracking Chronicle

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No: MC47407

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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MC47407-1 Collected: 17-AUG-16 11:49 By: LMFM Received: 19-AUG-16 By: NT
MW-1

MC47407-1 MADEP VPH REV 1.1 22-AUG-16 16:00 DF VMAVPH
MC47407-1 SW846 8260C 25-AUG-16 13:44 MC V8260MCP
MC47407-1 MADEP EPH REV 1.1 26-AUG-16 17:51 TA 22-AUG-16 AJ BMAEPH

MC47407-2 Collected: 17-AUG-16 11:50 By: LMFM Received: 19-AUG-16 By: NT
MW-2

MC47407-2 MADEP VPH REV 1.1 22-AUG-16 16:34 DF VMAVPH
MC47407-2 SW846 8260C 25-AUG-16 14:13 MC V8260MCP
MC47407-2 MADEP EPH REV 1.1 26-AUG-16 18:21 TA 22-AUG-16 AJ BMAEPH

MC47407-3 Collected: 17-AUG-16 09:58 By: LMFM Received: 19-AUG-16 By: NT
MW-3

MC47407-3 MADEP VPH REV 1.1 22-AUG-16 17:09 DF VMAVPH
MC47407-3 SW846 8260C 25-AUG-16 14:42 MC V8260MCP
MC47407-3 MADEP EPH REV 1.1 26-AUG-16 18:50 TA 22-AUG-16 AJ BMAEPH

MC47407-4 Collected: 17-AUG-16 10:44 By: LMFM Received: 19-AUG-16 By: NT
MW-103

MC47407-4 MADEP VPH REV 1.1 22-AUG-16 17:43 DF VMAVPH
MC47407-4 SW846 8260C 25-AUG-16 15:10 MC V8260MCP
MC47407-4 MADEP EPH REV 1.1 26-AUG-16 19:19 TA 22-AUG-16 AJ BMAEPH

MC47407-5 Collected: 17-AUG-16 10:40 By: LMFM Received: 19-AUG-16 By: NT
MW-108

MC47407-5 MADEP EPH REV 1.1 26-AUG-16 19:48 TA 22-AUG-16 AJ BMAEPH

MC47407-6 Collected: 17-AUG-16 08:54 By: LMFM Received: 19-AUG-16 By: NT
B-2/MW

MC47407-6 MADEP VPH REV 1.1 22-AUG-16 18:17 DF VMAVPH
MC47407-6 SW846 8260C 25-AUG-16 15:39 MC V8260MCP
MC47407-6 MADEP EPH REV 1.1 26-AUG-16 20:17 TA 22-AUG-16 AJ BMAEPH

Internal Sample Tracking Chronicle

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No: MC47407

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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MC47407-9ICollected: 17-AUG-16 07:31 By: LMFM Received: 19-AUG-16 By: NT
MW-106

MC47407-9ISW846 7470A 24-AUG-16 15:25 EAL 23-AUG-16 EM HG
MC47407-9ISW846 6010C 24-AUG-16 15:55 EAL 22-AUG-16 EM AC,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

MC47407-10ICollected: 17-AUG-16 08:43 By: LMFM Received: 19-AUG-16 By: NT
MW-107

MC47407-10ISW846 7470A 24-AUG-16 15:32 EAL 23-AUG-16 EM HG
MC47407-10ISW846 6010C 24-AUG-16 16:09 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

Internal Sample Tracking Chronicle

EnviroTrac

Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Project No: 03.990202.00

Job No: MC47407

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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MC47407-2ISW846 6010C 24-AUG-16 15:15 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

MC47407-3ICollected: 17-AUG-16 09:58 By: LMFM Received: 19-AUG-16 By: NT
MW-3

MC47407-3ISW846 7470A 24-AUG-16 15:14 EAL 23-AUG-16 EM HG
MC47407-3ISW846 6010C 24-AUG-16 15:20 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

MC47407-4ICollected: 17-AUG-16 10:44 By: LMFM Received: 19-AUG-16 By: NT
MW-103

MC47407-4ISW846 7470A 24-AUG-16 15:16 EAL 23-AUG-16 EM HG
MC47407-4ISW846 6010C 24-AUG-16 15:25 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

MC47407-6ICollected: 17-AUG-16 08:54 By: LMFM Received: 19-AUG-16 By: NT
B-2/MW

MC47407-6ISW846 7470A 24-AUG-16 15:18 EAL 23-AUG-16 EM HG
MC47407-6ISW846 6010C 24-AUG-16 15:40 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

MC47407-7ICollected: 17-AUG-16 09:41 By: LMFM Received: 19-AUG-16 By: NT
B-3/MW

MC47407-7ISW846 7470A 24-AUG-16 15:20 EAL 23-AUG-16 EM HG
MC47407-7ISW846 6010C 24-AUG-16 15:45 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

MC47407-8ICollected: 17-AUG-16 07:39 By: LMFM Received: 19-AUG-16 By: NT
MW-105

MC47407-8ISW846 7470A 24-AUG-16 15:23 EAL 23-AUG-16 EM HG
MC47407-8ISW846 6010C 24-AUG-16 15:50 EAL 22-AUG-16 EM AG,AS,BA,BE,CD,CR,NI,PB,SB,SE,TL,V,ZN

QC Evaluation: MA MCP Limits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

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QC Sample ID	CAS#	Analyte	Sample Result Type	Result	Units	Limits
MSN3823-BS	591-78-6	2-Hexanone	BSP	REC	126	%
MSN3823-BS	98-82-8	Isopropylbenzene	BSP	REC	106	%
MSN3823-BS	99-87-6	p-Isopropyltoluene	BSP	REC	116	%
MSN3823-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	102	%
MSN3823-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	113	%
MSN3823-BS	74-95-3	Methylene bromide	BSP	REC	89	%
MSN3823-BS	75-09-2	Methylene chloride	BSP	REC	112	%
MSN3823-BS	91-20-3	Naphthalene	BSP	REC	106	%
MSN3823-BS	103-65-1	n-Propylbenzene	BSP	REC	118	%
MSN3823-BS	100-42-5	Styrene	BSP	REC	104	%
MSN3823-BS	994-05-8	tert-Amyl Methyl Ether	BSP	REC	99	%
MSN3823-BS	637-92-3	tert-Butyl Ethyl Ether	BSP	REC	119	%
MSN3823-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	109	%
MSN3823-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	114	%
MSN3823-BS	127-18-4	Tetrachloroethene	BSP	REC	87	%
MSN3823-BS	109-99-9	Tetrahydrofuran	BSP	REC	108	%
MSN3823-BS	108-88-3	Toluene	BSP	REC	121	%
MSN3823-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	114	%
MSN3823-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	106	%
MSN3823-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	111	%
MSN3823-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	104	%
MSN3823-BS	79-01-6	Trichloroethene	BSP	REC	101	%
MSN3823-BS	75-69-4	Trichlorofluoromethane	BSP	REC	108	%
MSN3823-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	107	%
MSN3823-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	108	%
MSN3823-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	93	%
MSN3823-BS	75-01-4	Vinyl chloride	BSP	REC	114	%
MSN3823-BS		m,p-Xylene	BSP	REC	115	%
MSN3823-BS	95-47-6	o-Xylene	BSP	REC	114	%
MSN3823-BS	1330-20-7	Xylene (total)	BSP	REC	115	%
MSN3823-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	99	%
MSN3823-BS	2037-26-5	Toluene-D8	BSP	SURR	99	%
MSN3823-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	90	%
MSN3823-BSD	67-64-1	Acetone	BSD	REC	115	%
MSN3823-BSD	67-64-1	Acetone	BSD	RPD	4	%
MSN3823-BSD	71-43-2	Benzene	BSD	RPD	0	%
MSN3823-BSD	71-43-2	Benzene	BSD	RPD	0	%
MSN3823-BSD	108-86-1	Bromobenzene	BSD	REC	110	%
MSN3823-BSD	108-86-1	Bromobenzene	BSD	RPD	2	%
MSN3823-BSD	74-97-5	Bromochloromethane	BSD	REC	105	%
MSN3823-BSD	74-97-5	Bromochloromethane	BSD	RPD	3	%
MSN3823-BSD	75-27-4	Bromodichloromethane	BSD	REC	108	%
MSN3823-BSD	75-27-4	Bromodichloromethane	BSD	RPD	1	%
MSN3823-BSD	75-25-2	Bromoform	BSD	REC	108	%
MSN3823-BSD	75-25-2	Bromoform	BSD	RPD	1	%

* Sample used for QC is not from Job MC47407

QC Evaluation: MA MCP Limits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

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QC Sample ID	CAS#	Analyte	Sample Result Type	Result	Units	Limits
MSN3823	SW846 8260C					
MSN3823-BS	67-64-1	Acetone	BSP	REC	110	%
MSN3823-BS	71-43-2	Benzene	BSP	REC	102	%
MSN3823-BS	108-86-1	Bromobenzene	BSP	REC	108	%
MSN3823-BS	74-97-5	Bromochloromethane	BSP	REC	102	%
MSN3823-BS	75-27-4	Bromodichloromethane	BSP	REC	109	%
MSN3823-BS	75-25-2	Bromoform	BSP	REC	106	%
MSN3823-BS	74-83-9	Bromomethane	BSP	REC	106	%
MSN3823-BS	78-93-3	2-Butanone (MEK)	BSP	REC	105	%
MSN3823-BS	104-51-8	n-Butylbenzene	BSP	REC	117	%
MSN3823-BS	135-98-8	sec-Butylbenzene	BSP	REC	113	%
MSN3823-BS	98-06-6	tert-Butylbenzene	BSP	REC	111	%
MSN3823-BS	75-15-0	Carbon disulfide	BSP	REC	76	%
MSN3823-BS	56-23-5	Carbon tetrachloride	BSP	REC	110	%
MSN3823-BS	108-90-7	Chlorobenzene	BSP	REC	110	%
MSN3823-BS	75-00-3	Chloroethane	BSP	REC	94	%
MSN3823-BS	67-66-3	Chloroform	BSP	REC	102	%
MSN3823-BS	74-87-3	Chloromethane	BSP	REC	107	%
MSN3823-BS	95-49-8	o-Chlorotoluene	BSP	REC	103	%
MSN3823-BS	106-43-4	p-Chlorotoluene	BSP	REC	107	%
MSN3823-BS	108-20-3	Di-Isopropyl ether	BSP	REC	96	%
MSN3823-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	109	%
MSN3823-BS	124-48-1	Dibromochloromethane	BSP	REC	120	%
MSN3823-BS	106-93-4	1,2-Dibromoethane	BSP	REC	116	%
MSN3823-BS	95-50-1	1,2-Dichloroethane	BSP	REC	113	%
MSN3823-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	110	%
MSN3823-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	111	%
MSN3823-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	108	%
MSN3823-BS	75-34-3	1,1-Dichloroethane	BSP	REC	93	%
MSN3823-BS	107-06-2	1,2-Dichloroethane	BSP	REC	99	%
MSN3823-BS	75-35-4	1,1-Dichloroethene	BSP	REC	90	%
MSN3823-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	105	%
MSN3823-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	88	%
MSN3823-BS	78-87-5	1,2-Dichloropropane	BSP	REC	101	%
MSN3823-BS	142-28-9	1,3-Dichloropropane	BSP	REC	114	%
MSN3823-BS	594-20-7	2,2-Dichloropropane	BSP	REC	105	%
MSN3823-BS	563-58-6	1,1-Dichloropropene	BSP	REC	107	%
MSN3823-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	106	%
MSN3823-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	101	%
MSN3823-BS	123-91-1	1,4-Dioxane	BSP	REC	127	%
MSN3823-BS	60-29-7	Ethyl Ether	BSP	REC	88	%
MSN3823-BS	100-41-4	Ethylbenzene	BSP	REC	112	%
MSN3823-BS	87-68-3	Hexachlorobutadiene	BSP	REC	126	%

* Sample used for QC is not from Job MC47407

QC Evaluation: MA MCP Limits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units Limits
MSN3823-BSD	107-06-2	1,2-Dichloroethane	BSD	RPD	0	% 20
MSN3823-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	93	% 70-130
MSN3823-BSD	75-35-4	1,1-Dichloroethene	BSD	RPD	4	% 20
MSN3823-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	108	% 70-130
MSN3823-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	RPD	2	% 20
MSN3823-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	REC	92	% 70-130
MSN3823-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	RPD	5	% 20
MSN3823-BSD	78-87-5	1,2-Dichloropropane	BSD	REC	101	% 70-130
MSN3823-BSD	78-87-5	1,2-Dichloropropane	BSD	RPD	0	% 20
MSN3823-BSD	142-28-9	1,3-Dichloropropane	BSD	REC	115	% 70-130
MSN3823-BSD	142-28-9	1,3-Dichloropropane	BSD	RPD	1	% 20
MSN3823-BSD	594-20-7	2,2-Dichloropropane	BSD	REC	106	% 70-130
MSN3823-BSD	594-20-7	2,2-Dichloropropane	BSD	RPD	2	% 20
MSN3823-BSD	563-58-6	1,1-Dichloropropene	BSD	REC	107	% 70-130
MSN3823-BSD	563-58-6	1,1-Dichloropropene	BSD	RPD	0	% 20
MSN3823-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	REC	105	% 70-130
MSN3823-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	RPD	1	% 20
MSN3823-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	REC	101	% 70-130
MSN3823-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	RPD	0	% 20
MSN3823-BSD	123-91-1	1,4-Dioxane	BSD	REC	100	% 70-130
MSN3823-BSD	123-91-1	1,4-Dioxane	BSD	RPD	24	% 20
MSN3823-BSD	60-29-7	Ethyl Ether	BSD	REC	90	% 70-130
MSN3823-BSD	60-29-7	Ethyl Ether	BSD	RPD	2	% 20
MSN3823-BSD	100-41-4	Ethylbenzene	BSD	REC	115	% 70-130
MSN3823-BSD	100-41-4	Ethylbenzene	BSD	RPD	2	% 20
MSN3823-BSD	87-68-3	Hexachlorobutadiene	BSD	REC	132	% 70-130
MSN3823-BSD	87-68-3	Hexachlorobutadiene	BSD	RPD	5	% 20
MSN3823-BSD	591-78-6	2-Hexanone	BSD	REC	128	% 70-130
MSN3823-BSD	591-78-6	2-Hexanone	BSD	RPD	2	% 20
MSN3823-BSD	98-82-8	Isopropylbenzene	BSD	REC	109	% 70-130
MSN3823-BSD	98-82-8	Isopropylbenzene	BSD	RPD	3	% 20
MSN3823-BSD	99-87-6	p-Isopropyltoluene	BSD	REC	119	% 70-130
MSN3823-BSD	99-87-6	p-Isopropyltoluene	BSD	RPD	2	% 20
MSN3823-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	105	% 70-130
MSN3823-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	RPD	3	% 20
MSN3823-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	REC	113	% 70-130
MSN3823-BSD	108-10-1	4-Methyl-2-pentanone (MIBK)	BSD	RPD	1	% 20
MSN3823-BSD	74-95-3	Methylene bromide	BSD	REC	104	% 70-130
MSN3823-BSD	74-95-3	Methylene bromide	BSD	RPD	1	% 20
MSN3823-BSD	75-09-2	Methylene chloride	BSD	REC	92	% 70-130
MSN3823-BSD	75-09-2	Methylene chloride	BSD	RPD	3	% 20
MSN3823-BSD	91-20-3	Naphthalene	BSD	REC	117	% 70-130
MSN3823-BSD	91-20-3	Naphthalene	BSD	RPD	4	% 20
MSN3823-BSD	103-65-1	n-Propylbenzene	BSD	REC	109	% 70-130
MSN3823-BSD	103-65-1	n-Propylbenzene	BSD	RPD	3	% 20

* Sample used for QC is not from Job MC47407

QC Evaluation: MA MCP Limits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units Limits
MSN3823-BSD	74-83-9	Bromomethane	BSD	REC	113	% 70-130
MSN3823-BSD	74-83-9	Bromomethane	BSD	RPD	6	% 20
MSN3823-BSD	78-93-3	2-Butanone (MEK)	BSD	REC	108	% 70-130
MSN3823-BSD	78-93-3	2-Butanone (MEK)	BSD	RPD	3	% 20
MSN3823-BSD	104-51-8	n-Butylbenzene	BSD	REC	120	% 70-130
MSN3823-BSD	104-51-8	n-Butylbenzene	BSD	RPD	2	% 20
MSN3823-BSD	135-98-8	sec-Butylbenzene	BSD	REC	115	% 70-130
MSN3823-BSD	135-98-8	sec-Butylbenzene	BSD	RPD	2	% 20
MSN3823-BSD	98-06-6	tert-Butylbenzene	BSD	REC	113	% 70-130
MSN3823-BSD	98-06-6	tert-Butylbenzene	BSD	RPD	3	% 20
MSN3823-BSD	75-15-0	Carbon disulfide	BSD	REC	79	% 70-130
MSN3823-BSD	75-15-0	Carbon disulfide	BSD	RPD	4	% 20
MSN3823-BSD	56-23-5	Carbon tetrachloride	BSD	REC	113	% 70-130
MSN3823-BSD	56-23-5	Carbon tetrachloride	BSD	RPD	2	% 20
MSN3823-BSD	108-90-7	Chlorobenzene	BSD	REC	112	% 70-130
MSN3823-BSD	108-90-7	Chlorobenzene	BSD	RPD	2	% 20
MSN3823-BSD	75-00-3	Chloroethane	BSD	REC	96	% 70-130
MSN3823-BSD	75-00-3	Chloroethane	BSD	RPD	2	% 20
MSN3823-BSD	67-66-3	Chloroform	BSD	REC	105	% 70-130
MSN3823-BSD	67-66-3	Chloroform	BSD	RPD	2	% 20
MSN3823-BSD	74-87-3	Chloromethane	BSD	REC	110	% 70-130
MSN3823-BSD	74-87-3	Chloromethane	BSD	RPD	3	% 20
MSN3823-BSD	95-49-8	o-Chlorotoluene	BSD	REC	105	% 70-130
MSN3823-BSD	95-49-8	o-Chlorotoluene	BSD	RPD	2	% 20
MSN3823-BSD	106-43-4	p-Chlorotoluene	BSD	REC	109	% 70-130
MSN3823-BSD	106-43-4	p-Chlorotoluene	BSD	RPD	2	% 20
MSN3823-BSD	108-20-3	Di-Isopropyl ether	BSD	REC	97	% 70-130
MSN3823-BSD	108-20-3	Di-Isopropyl ether	BSD	RPD	2	% 20
MSN3823-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	REC	110	% 70-130
MSN3823-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	RPD	0	% 20
MSN3823-BSD	124-48-1	Dibromochloromethane	BSD	REC	122	% 70-130
MSN3823-BSD	124-48-1	Dibromochloromethane	BSD	RPD	2	% 20
MSN3823-BSD	106-93-4	1,2-Dibromoethane	BSD	REC	119	% 70-130
MSN3823-BSD	106-93-4	1,2-Dibromoethane	BSD	RPD	3	% 20
MSN3823-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	113	% 70-130
MSN3823-BSD	95-50-1	1,2-Dichlorobenzene	BSD	RPD	0	% 20
MSN3823-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC	112	% 70-130
MSN3823-BSD	541-73-1	1,3-Dichlorobenzene	BSD	RPD	2	% 20
MSN3823-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	111	% 70-130
MSN3823-BSD	106-46-7	1,4-Dichlorobenzene	BSD	RPD	1	% 20
MSN3823-BSD	75-71-8	Dichlorodifluoromethane	BSD	REC	113	% 70-130
MSN3823-BSD	75-71-8	Dichlorodifluoromethane	BSD	RPD	5	% 20
MSN3823-BSD	75-34-3	1,1-Dichloroethane	BSD	REC	96	% 70-130
MSN3823-BSD	75-34-3	1,1-Dichloroethane	BSD	RPD	3	% 20
MSN3823-BSD	107-06-2	1,2-Dichloroethane	BSD	REC	99	% 70-130

* Sample used for QC is not from Job MC47407

QC Evaluation: MA MCP Limits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Units	Limits
MSN3823-MB	1868-53-7	Dibromofluoromethane	MB	SURR	99	%
MSN3823-MB	2037-26-5	Toluene-D8	MB	SURR	97	%
MSN3823-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	91	%
MC47407-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	100	%
MC47407-1	2037-26-5	Toluene-D8	SAMP	SURR	98	%
MC47407-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	93	%
MC47407-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%
MC47407-2	2037-26-5	Toluene-D8	SAMP	SURR	99	%
MC47407-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	92	%
MC47407-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%
MC47407-3	2037-26-5	Toluene-D8	SAMP	SURR	98	%
MC47407-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	93	%
MC47407-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%
MC47407-4	2037-26-5	Toluene-D8	SAMP	SURR	98	%
MC47407-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	94	%
MC47407-6	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%
MC47407-6	2037-26-5	Toluene-D8	SAMP	SURR	99	%
MC47407-6	460-00-4	4-Bromofluorobenzene	SAMP	SURR	95	%
MC47407-7	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%
MC47407-7	2037-26-5	Toluene-D8	SAMP	SURR	98	%
MC47407-7	460-00-4	4-Bromofluorobenzene	SAMP	SURR	93	%
MC47407-8	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%
MC47407-8	2037-26-5	Toluene-D8	SAMP	SURR	97	%
MC47407-8	460-00-4	4-Bromofluorobenzene	SAMP	SURR	94	%
MC47407-9	1868-53-7	Dibromofluoromethane	SAMP	SURR	100	%
MC47407-9	2037-26-5	Toluene-D8	SAMP	SURR	97	%
MC47407-9	460-00-4	4-Bromofluorobenzene	SAMP	SURR	94	%
MC47407-10	1868-53-7	Dibromofluoromethane	SAMP	SURR	100	%
MC47407-10	2037-26-5	Toluene-D8	SAMP	SURR	99	%
MC47407-10	460-00-4	4-Bromofluorobenzene	SAMP	SURR	94	%

* Sample used for QC is not from job MC47407

QC Evaluation: MA MCP Limits

Job Number: MC47407
Account: EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA
Collected: 08/17/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Units	Limits
MSN3823-BSD	100-42-5	Styrene	BSD	REC	122	%
MSN3823-BSD	100-42-5	Styrene	BSD	RPD	4	%
MSN3823-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	REC	104	%
MSN3823-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	RPD	0	%
MSN3823-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	REC	100	%
MSN3823-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	RPD	1	%
MSN3823-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	REC	122	%
MSN3823-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	RPD	3	%
MSN3823-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	REC	110	%
MSN3823-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	RPD	1	%
MSN3823-BSD	127-18-4	Tetrachloroethene	BSD	REC	118	%
MSN3823-BSD	127-18-4	Tetrachloroethene	BSD	RPD	3	%
MSN3823-BSD	109-99-9	Tetrahydrofuran	BSD	REC	89	%
MSN3823-BSD	109-99-9	Tetrahydrofuran	BSD	RPD	1	%
MSN3823-BSD	108-88-3	Toluene	BSD	REC	108	%
MSN3823-BSD	108-88-3	Toluene	BSD	RPD	1	%
MSN3823-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	REC	127	%
MSN3823-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	RPD	5	%
MSN3823-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	118	%
MSN3823-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	RPD	3	%
MSN3823-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	109	%
MSN3823-BSD	71-55-6	1,1,1-Trichloroethane	BSD	RPD	3	%
MSN3823-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	111	%
MSN3823-BSD	79-00-5	1,1,2-Trichloroethane	BSD	RPD	0	%
MSN3823-BSD	79-01-6	Trichloroethene	BSD	REC	105	%
MSN3823-BSD	79-01-6	Trichloroethene	BSD	RPD	1	%
MSN3823-BSD	75-69-4	Trichlorofluoromethane	BSD	REC	106	%
MSN3823-BSD	75-69-4	Trichlorofluoromethane	BSD	RPD	5	%
MSN3823-BSD	96-18-4	1,2,3-Trichloropropane	BSD	REC	110	%
MSN3823-BSD	96-18-4	1,2,3-Trichloropropane	BSD	RPD	2	%
MSN3823-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	REC	109	%
MSN3823-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	RPD	2	%
MSN3823-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	REC	110	%
MSN3823-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	RPD	2	%
MSN3823-BSD	75-01-4	Vinyl chloride	BSD	REC	97	%
MSN3823-BSD	75-01-4	Vinyl chloride	BSD	RPD	4	%
MSN3823-BSD		m,p-Xylene	BSD	REC	117	%
MSN3823-BSD		m,p-Xylene	BSD	RPD	3	%
MSN3823-BSD	95-47-6	o-Xylene	BSD	REC	118	%
MSN3823-BSD	95-47-6	o-Xylene	BSD	RPD	3	%
MSN3823-BSD	1330-20-7	Xylene (total)	BSD	REC	117	%
MSN3823-BSD	1330-20-7	Xylene (total)	BSD	RPD	3	%
MSN3823-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	99	%
MSN3823-BSD	2037-26-5	Toluene-D8	BSD	SURR	98	%
MSN3823-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	90	%

* Sample used for QC is not from job MC47407

Method Blank Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3823-MB	N104275.D	1	08/25/16	MC	n/a	n/a	MSN3823

ACCUTEST
New England

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

The QC reported here applies to the following samples:

Method: SW846 8260C

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3823-MB	N104275.D	1	08/25/16	MC	n/a	n/a	MSN3823

The QC reported here applies to the following samples:

Method: SW846 8260C

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

CAS No.	Surrogate Recoveries	Limits	R.T.	Est. Conc.	Units	Q
1868-53-7	Dibromofluoromethane	99%				
2037-26-5	Toluene-D8	97%				
460-00-4	4-Bromofluorobenzene	91%				
CAS No.	Tentatively Identified Compounds					
	Total TIC, Volatile			0	ug/l	

Method Blank Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3823-MB	N104275.D	1	08/25/16	MC	n/a	n/a	MSN3823

The QC reported here applies to the following samples:

Method: SW846 8260C

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
60-29-7	Ethyl Ether	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	1.2	5.0	ug/l	J
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.95	5.0	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	0.93	5.0	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
95-47-6	m,p-Xylene	ND	1.0	ug/l	
1330-20-7	o-Xylene	ND	1.0	ug/l	
	Xylene (total)	ND	1.0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3823-BS	N104272.D	1	08/25/16	MC	n/a	n/a	MSN3823
MSN3823-BSD	N104273.D	1	08/25/16	MC	n/a	n/a	MSN3823

The QC reported here applies to the following samples:

Method: SW846 8260C

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	53.0	106	52.7	105	1	61-145/25
10061-02-6	trans-1,3-Dichloropropene	50	50.5	101	50.3	101	0	60-134/25
123-91-1	1,4-Dioxane	250	317	127	250	100	24	20-167/25
60-29-7	Ethyl Ether	50	43.8	88	44.9	90	2	45-152/25
100-41-4	Ethylbenzene	50	55.9	112	57.3	115	2	74-127/25
87-68-3	Hexachlorobutadiene	50	63.2	126	66.2	132	5	71-141/25
591-78-6	2-Hexanone	50	63.2	126	64.2	128	2	44-166/25
98-82-8	Isopropylbenzene	50	53.0	106	54.4	109	3	70-131/25
99-87-6	p-Isopropyltoluene	50	58.0	116	59.4	119	2	79-131/25
1634-04-4	Methyl Tert Butyl Ether	50	50.8	102	52.3	105	3	59-135/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	56.7	113	56.4	113	1	63-138/25
74-95-3	Methylene bromide	50	52.3	105	52.0	104	1	70-124/25
75-09-2	Methylene chloride	50	44.5	89	46.0	92	3	54-132/25
91-20-3	Naphthalene	50	56.1	112	58.4	117	4	37-145/25
103-65-1	n-Propylbenzene	50	53.0	106	54.7	109	3	71-128/25
100-42-5	Styrene	50	59.0	118	61.2	122	4	76-130/25
994-05-8	tert-Amyl Methyl Ether	50	51.8	104	52.0	104	0	63-131/25
637-92-3	tert-Butyl Ethyl Ether	50	49.4	99	50.0	100	1	59-134/300
630-20-6	1,1,1,2-Tetrachloroethane	50	59.4	119	61.0	122	3	71-139/25
79-34-5	1,1,2,2-Tetrachloroethane	50	54.6	109	55.2	110	1	62-130/25
127-18-4	Tetrachloroethene	50	57.1	114	58.8	118	3	68-133/25
109-99-9	Tetrahydrofuran	50	43.7	87	44.3	89	1	52-131/25
108-88-3	Toluene	50	53.9	108	54.2	108	1	73-124/25
87-61-6	1,2,3-Trichlorobenzene	50	60.5	121	63.3	127	5	58-144/25
120-82-1	1,2,4-Trichlorobenzene	50	57.2	114	58.9	118	3	63-137/25
71-55-6	1,1,1-Trichloroethane	50	53.0	106	54.5	109	3	60-135/25
79-00-5	1,1,2-Trichloroethane	50	55.5	111	55.3	111	0	72-125/25
79-01-6	Trichloroethene	50	52.0	104	52.6	105	1	73-120/25
75-69-4	Trichlorofluoromethane	50	50.4	101	53.0	106	5	52-152/25
96-18-4	1,2,3-Trichloropropane	50	54.2	108	55.2	110	2	56-136/25
95-63-6	1,2,4-Trimethylbenzene	50	53.3	107	54.6	109	2	76-125/25
108-67-8	1,3,5-Trimethylbenzene	50	54.0	108	55.1	110	2	76-132/25
75-01-4	Vinyl chloride	50	46.6	93	48.6	97	4	49-154/25
95-47-6	m,p-Xylene	100	114	114	117	117	3	73-129/25
1330-20-7	o-Xylene	50	57.5	115	59.0	118	3	73-128/25
	Xylene (total)	150	171	114	176	117	3	74-129/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3823-BS	N104272.D	1	08/25/16	MC	n/a	n/a	MSN3823
MSN3823-BSD	N104273.D	1	08/25/16	MC	n/a	n/a	MSN3823

The QC reported here applies to the following samples:

Method: SW846 8260C

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	55.1	110	57.5	115	4	24-200/25
71-43-2	Benzene	50	51.0	102	51.1	102	0	66-123/25
108-86-1	Bromobenzene	50	53.9	108	54.8	110	2	73-124/25
74-97-5	Bromochloromethane	50	50.9	102	52.6	105	3	65-127/25
75-27-4	Bromodichloromethane	50	54.6	109	54.1	108	1	68-130/25
75-25-2	Bromoform	50	53.2	106	53.8	108	1	61-149/25
74-83-9	Bromomethane	50	53.0	106	56.5	113	6	52-151/25
78-93-3	2-Butanone (MEK)	50	52.3	105	53.9	108	3	45-171/25
104-51-8	n-Butylbenzene	50	58.5	117	59.9	120	2	80-134/30
135-98-8	sec-Butylbenzene	50	56.4	113	57.5	115	2	77-132/25
98-06-6	tert-Butylbenzene	50	55.3	111	56.7	113	3	71-130/25
75-15-0	Carbon disulfide	50	38.0	76	39.7	79	4	24-164/25
56-23-5	Carbon tetrachloride	50	55.1	110	56.4	113	2	54-151/25
108-90-7	Chlorobenzene	50	54.9	110	56.0	112	2	75-117/25
75-00-3	Chloroethane	50	46.9	94	48.0	96	2	54-160/25
67-66-3	Chloroform	50	51.2	102	52.3	105	2	65-127/25
74-87-3	Chloromethane	50	53.3	107	55.0	110	3	43-154/25
95-49-8	o-Chlorotoluene	50	51.3	103	52.4	105	2	71-128/25
106-43-4	p-Chlorotoluene	50	53.4	107	54.5	109	2	71-125/25
108-20-3	Di-Isopropyl ether	50	47.9	96	48.7	97	2	58-143/50
96-12-8	1,2-Dibromo-3-chloropropane	50	54.6	109	54.8	110	0	53-145/25
124-48-1	Dibromochloromethane	50	60.1	120	61.1	122	2	67-137/25
106-93-4	1,2-Dibromoethane	50	57.8	116	59.3	119	3	73-126/25
95-50-1	1,2-Dichlorobenzene	50	56.7	113	56.6	113	0	75-124/25
541-73-1	1,3-Dichlorobenzene	50	55.2	110	56.1	112	2	76-120/25
106-46-7	1,4-Dichlorobenzene	50	55.3	111	55.6	111	1	77-117/25
75-71-8	Dichlorodifluoromethane	50	54.0	108	56.5	113	5	20-161/25
75-34-3	1,1-Dichloroethane	50	46.7	93	48.1	96	3	55-128/25
107-06-2	1,2-Dichloroethane	50	49.6	99	49.7	99	0	68-126/25
75-35-4	1,1-Dichloroethene	50	45.0	90	46.7	93	4	44-148/25
156-59-2	cis-1,2-Dichloroethene	50	52.5	105	53.8	108	2	63-132/25
156-60-5	trans-1,2-Dichloroethene	50	43.9	88	46.0	92	5	54-127/25
78-87-5	1,2-Dichloropropane	50	50.7	101	50.6	101	0	68-123/25
142-28-9	1,3-Dichloropropane	50	56.8	114	57.4	115	1	75-130/25
594-20-7	2,2-Dichloropropane	50	52.3	105	53.2	106	2	47-156/25
563-58-6	1,1-Dichloropropene	50	53.6	107	53.7	107	0	65-123/25

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Check Std:	MSN3823-CC3802	Injection Date:	08/25/16
Lab File ID:	N104271.D	Injection Time:	09:26
Instrument ID:	GCMSN	Method:	SW846 8260C

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	615052	10.33	347055	13.51	157687	7.45	371489	9.46	310176	16.07
Upper Limit ^a	1230104	10.83	694110	14.01	315374	7.95	742978	9.96	620352	16.57
Lower Limit ^b	307526	9.83	173528	13.01	78844	6.95	185745	8.96	155088	15.57

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
MSN3823-BS	609937	10.33	343329	13.51	161371	7.45	373463	9.46	312294	16.07
MSN3823-BSD	619846	10.33	344640	13.51	160800	7.45	370592	9.46	314998	16.07
MSN3823-MB	606638	10.33	342510	13.51	174361	7.46	362947	9.46	291774	16.07
ZZZZZZ	609388	10.33	344765	13.51	180643	7.46	357318	9.46	299793	16.07
ZZZZZZ	609388	10.33	344765	13.51	180643	7.46	357318	9.46	299793	16.07
ZZZZZZ	599974	10.33	343509	13.51	175117	7.46	357030	9.46	287583	16.07
ZZZZZZ	599069	10.33	344622	13.51	148194	7.45	360471	9.46	306336	16.07
ZZZZZZ	615426	10.33	346483	13.51	177853	7.46	367714	9.46	289721	16.07
MC47407-1	608500	10.33	346805	13.51	176020	7.46	360850	9.46	291427	16.07
MC47407-2	606547	10.33	350681	13.51	173586	7.46	362691	9.46	295111	16.07
MC47407-3	602360	10.33	343885	13.51	167739	7.46	361123	9.46	291250	16.07
MC47407-4	612555	10.33	353363	13.51	180622	7.46	367719	9.46	290218	16.07
MC47407-6	609550	10.33	346420	13.51	181392	7.46	365013	9.46	287465	16.07
MC47407-7	609518	10.33	348724	13.51	185497	7.46	364041	9.46	292524	16.07
MC47407-8	614891	10.33	350852	13.51	186326	7.46	367117	9.46	290327	16.07
MC47407-9	608675	10.33	351795	13.51	185209	7.46	357916	9.46	294829	16.07
MC47407-10	598624	10.33	347521	13.51	174298	7.46	356184	9.46	288540	16.07
ZZZZZZ	600578	10.33	344510	13.51	161503	7.46	354545	9.46	293582	16.07
ZZZZZZ	611917	10.33	351714	13.51	184706	7.46	362467	9.46	290672	16.07
ZZZZZZ	610019	10.33	348020	13.51	182398	7.46	362907	9.46	292705	16.07
ZZZZZZ	606418	10.33	348388	13.51	177417	7.46	356864	9.46	295196	16.07
ZZZZZZ	607297	10.33	347778	13.51	183619	7.46	360174	9.46	289762	16.07
ZZZZZZ	607811	10.33	348116	13.51	181611	7.46	356724	9.46	296023	16.07
MSN3823-ECC3802	9327	10.33	349222	13.51	172800	7.45	362362	9.46	314356	16.07

- IS 1 = 1,4-Difluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = Tert Butyl Alcohol-D9
IS 4 = Pentafluorobenzene
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3823-BS	N104272.D	1	08/25/16	MC	n/a	n/a	MSN3823
MSN3823-BSD	N104273.D	1	08/25/16	MC	n/a	n/a	MSN3823

The QC reported here applies to the following samples:

Method: SW846 8260C

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	99%	76-129%
2037-26-5	Toluene-D8	99%	98%	83-114%
460-00-4	4-Bromofluorobenzene	90%	90%	75-124%

* = Outside of Control Limits.

Section 7

Volatile Surrogate Recovery Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: SW846 8260C	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC47407-1	N104280.D	100	98	93
MC47407-2	N104281.D	99	99	92
MC47407-3	N104282.D	99	98	93
MC47407-4	N104283.D	99	98	94
MC47407-6	N104284.D	99	99	95
MC47407-7	N104285.D	99	98	93
MC47407-8	N104286.D	99	97	94
MC47407-9	N104287.D	100	97	94
MC47407-10	N104288.D	100	99	94
MSN3823-BS	N104272.D	99	99	90
MSN3823-BSD	N104273.D	99	98	90
MSN3823-MB	N104275.D	99	97	91

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-129%
S2 = Toluene-D8	83-114%
S3 = 4-Bromofluorobenzene	75-124%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH2374-BSP	BH39907.D	1	08/22/16	DF	n/a	n/a	GBH2374
GBH2374-BSD	BH39908.D	1	08/22/16	DF	n/a	n/a	GBH2374

The QC reported here applies to the following samples:

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

Method: MADEP VPH REV 1.1

7.2.1

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CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	46.7	93	49.6	99	6	70-130/25
100-41-4	Ethylbenzene	50	45.0	90	47.5	95	5	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	49.5	99	52.8	106	6	70-130/25
91-20-3	Naphthalene	50	49.6	99	51.5	103	4	70-130/25
108-88-3	Toluene	50	45.7	91	48.6	97	6	70-130/25
	m,p-Xylene	100	91.3	91	95.7	96	5	70-130/25
95-47-6	o-Xylene	50	45.6	91	48.3	97	6	70-130/25
	C5- C8 Aliphatics (Unadj.)	150	138	92	145	97	5	70-130/25
	C9- C12 Aliphatics (Unadj.)	150	129	86	136	91	5	70-130/25
	C9- C10 Aromatics (Unadj.)	50	46.2	92	48.2	96	4	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	89%	93%	70-130%
	2,3,4-Trifluorotoluene	91%	94%	70-130%

* = Outside of Control Limits.

Method Blank Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH2374-MB	BH39906.D	1	08/22/16	DF	n/a	n/a	GBH2374

The QC reported here applies to the following samples:

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

Method: MADEP VPH REV 1.1

7.1.1

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CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Limits
	2,3,4-Trifluorotoluene	81%
	2,3,4-Trifluorotoluene	83%

Section 8

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Volatile Surrogate Recovery Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: MADEP VPH REV 1.1	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b
MC47407-1	BH39916.D	83	83
MC47407-2	BH39917.D	83	83
MC47407-3	BH39918.D	84	84
MC47407-4	BH39919.D	83	83
MC47407-6	BH39920.D	83	83
MC47407-7	BH39921.D	81	81
MC47407-8	BH39922.D	81	82
MC47407-9	BH39923.D	82	83
MC47407-10	BH39924.D	82	82
GBH2374-BSD	BH39908.D	93	94
GBH2374-BSP	BH39907.D	89	91
GBH2374-MB	BH39906.D	81	83

Surrogate Compounds Recovery Limits

S1 = 2,3,4-Trifluorotoluene 70-130%

- (a) Recovery from GC signal #2
- (b) Recovery from GC signal #1

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48508-BS	DE15350.D	1	08/26/16	TA	08/22/16	OP48508	GDE856
OP48508-BSD	DE15351.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

The QC reported here applies to the following samples:

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-5, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

Method: MADEP EPH REV 1.1

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CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	50	28.6	57	34.9	70	20	40-140/25
208-96-8	Acenaphthylene	50	27.1	54	33.3	67	21	40-140/25
120-12-7	Anthracene	50	29.5	59	37.1	74	23	40-140/25
56-55-3	Benzo(a)anthracene	50	37.3	75	46.7	93	22	40-140/25
50-32-8	Benzo(a)pyrene	50	37.7	75	46.1	92	20	40-140/25
205-99-2	Benzo(b)fluoranthene	50	40.4	81	51.9	104	25	40-140/25
191-24-2	Benzo(g,h,i)perylene	50	42.7	85	51.7	103	19	40-140/25
207-08-9	Benzo(k)fluoranthene	50	35.1	70	41.8	84	17	40-140/25
218-01-9	Chrysene	50	35.2	70	43.8	88	22	40-140/25
53-70-3	Dibenz(a,h)anthracene	50	41.2	82	49.8	100	19	40-140/25
206-44-0	Fluoranthene	50	34.9	70	44.3	89	24	40-140/25
86-73-7	Fluorene	50	30.1	60	37.1	74	21	40-140/25
193-39-5	Indeno(1,2,3-cd)pyrene	50	39.0	78	48.5	97	22	40-140/25
91-57-6	2-Methylnaphthalene	50	28.2	56	34.5	69	20	40-140/25
91-20-3	Naphthalene	50	23.1	46	28.5	57	21	40-140/25
85-01-8	Phenanthrene	50	32.2	64	40.9	82	24	40-140/25
129-00-0	Pyrene	50	33.5	67	43.5	87	26* a	40-140/25
	C11-C22 Aromatics (Unadj.)	800	641	80	778	97	19	40-140/25
	C9-C18 Aliphatics	300	230	77	229	76	0	40-140/25
	C19-C36 Aliphatics	400	335	84	333	83	1	40-140/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	71%	89%	40-140%
321-60-8	2-Fluorobiphenyl	70%	84%	40-140%
3386-33-2	1-Chlorooctadecane	87%	92%	40-140%
580-13-2	2-Bromonaphthalene	71%	85%	40-140%
Sample	Compound	Col #1	Col #2	Breakthrough Limit
OP48508-BS	2-Methylnaphthalene	28.2	ND	5.0
OP48508-BS	Naphthalene	23.1	ND	5.0
OP48508-BSD	2-Methylnaphthalene	34.5	ND	5.0
OP48508-BSD	Naphthalene	28.5	ND	5.0

* = Outside of Control Limits.

Method Blank Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48508-MB	DE15349.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

The QC reported here applies to the following samples:

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-5, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

Method: MADEP EPH REV 1.1

8.1.1



CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	ug/l	
	C11-C22 Aromatics (Unadj.)	33.4	100	ug/l	J
	C9-C18 Aliphatics	26.2	100	ug/l	J
	C19-C36 Aliphatics	42.5	100	ug/l	J
	C11-C22 Aromatics	33.4	100	ug/l	J

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	40-140%
321-60-8	2-Fluorobiphenyl	40-140%
3386-33-2	1-Chlorooctadecane	40-140%
580-13-2	2-Bromonaphthalene	40-140%

Semivolatle Surrogate Recovery Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Method: MADEP EPH REV 1.1		Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a	S3 ^b	S4 ^a
MC47407-1	DE15352.D	69	66	84	65
MC47407-2	DE15353.D	72	67	78	78
MC47407-3	DE15354.D	76	75	79	88
MC47407-4	DE15355.D	61	61	76	60
MC47407-5	DE15356.D	70	68	79	80
MC47407-6	DE15357.D	76	69	74	80
MC47407-7	DE15358.D	77	76	76	89
MC47407-8	DE15360.D	72	70	69	83
MC47407-9	DE15361.D	70	70	80	81
MC47407-10	DE15362.D	80	77	81	91
OP48508-BS	DE15350.D	71	70	87	71
OP48508-BSD	DE15351.D	89	84	92	85
OP48508-MB	DE15349.D	78	76	88	90

Surrogate Compounds Recovery Limits

S1 = o-Terphenyl 40-140%
S2 = 2-Fluorobiphenyl 40-140%
S3 = 1-Chlorooctadecane 40-140%
S4 = 2-Bromonaphthalene 40-140%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC47407
Account: ENVTRAC EnviroTrac
Project: Magglore Somerville, 343 - 351 Summer Street, Somerville, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48508-BS	DE15350.D	1	08/26/16	TA	08/22/16	OP48508	GDE856
OP48508-BSD	DE15351.D	1	08/26/16	TA	08/22/16	OP48508	GDE856

The QC reported here applies to the following samples: Method: MADEP EPH REV 1.1

MC47407-1, MC47407-2, MC47407-3, MC47407-4, MC47407-5, MC47407-6, MC47407-7, MC47407-8, MC47407-9, MC47407-10

(a) Target recovery satisfactory.

* = Outside of Control Limits.



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New England

Section 9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

QC Batch ID: MP26664
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Print Date: 08/22/16

Metal	RL	IRL	MDL	MR raw	MR final	MR raw	MR final
Aluminum	200	26	25				
Antimony	6.0	1.8	1.2	0.20	<6.0	1.0	<6.0
Arsenic	4.0	2.6	2	1.2	<4.0	0.40	<4.0
Barium	50	.5	.57	0.20	<50	0.40	<50
Beryllium	4.0	.18	.34	0.0	<4.0	0.0	<4.0
Bismuth	50	3.1	1.8				
Boron	100	1.4	2.3				
Cadmium	4.0	.2	.3	0.0	<4.0	0.0	<4.0
Calcium	5000	11	18				
Chromium	10	.57	1.1	0.20	<10	0.20	<10
Cobalt	50	.26	.41				
Copper	25	.55	4.2				
Gold	50	1.2	1.3				
Iron	100	4.7	16				
Lead	5.0	1.1	1.1	-0.60	<5.0	0.10	<5.0
Lithium	500	5.2	1.8				
Magnesium	5000	47	56				
Manganese	15	.051	.41				
Molybdenum	100	1.6	16				
Nickel	40	.34	.35	-0.60	<40	-0.30	<40
Palladium	50	1.8	1.4				
Platinum	50	8.7	4.7				
Potassium	5000	74	78				
Selenium	10	2.8	3.4	0.50	<10	0.10	<10
Silicon	100	15	11				
Silver	5.0	.75	1.4	0.10	<5.0	0.20	<5.0
Sodium	5000	23	35				
Sulfur	50	3.7	3.3				
Strontium	10	.27	.17				
Thallium	5.0	1.2	1.6	-0.60	<5.0	-0.40	<5.0
Tin	100	.52	2.2				
Titanium	50	.54	.99				
Tungsten	100	4	23				

9.1.1

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Metals Analysis

QC Data Summaries

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26664
Matrix Type: AQUEOUS
Prep Date: 08/22/16
Login Number: MC47407
Account: ENVIRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Methods: SW846 6010C
Units: ug/l

Prep Date:		08/22/16		08/22/16					
Metal	RSP Result	SpikeLot MPICP7	QC Limits	BSD Result	SpikeLot MPICP7	% Rec	BSD RPD	QC Limit	
Aluminum	anr								
Antimony	503	500	100.6	80-120	505	500	101.0	0.4	20
Arsenic	498	500	99.6	80-120	503	500	100.6	1.0	20
Barium	1960	2000	98.0	80-120	1970	2000	98.5	0.5	20
Beryllium	485	500	97.0	80-120	482	500	96.4	0.6	20
Bismuth									
Boron									
Cadmium	485	500	97.0	80-120	490	500	98.0	1.0	20
Calcium	anr								
Chromium	482	500	96.4	80-120	481	500	96.2	0.2	20
Cobalt	anr								
Copper	anr								
Gold									
Iron	anr								
Lead	975	1000	97.5	80-120	984	1000	98.4	0.9	20
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	488	500	97.6	80-120	494	500	98.8	1.2	20
Failed:									
Platinum									
Potassium	anr								
Selenium	505	500	101.0	80-120	508	500	101.6	0.6	20
Silicon									
Silver	185	200	92.5	80-120	185	200	92.5	0.0	20
Sodium	anr								
Sulfur									
Strontium									
Thallium	505	500	101.0	80-120	510	500	102.0	1.0	20
Tin									
Titanium									
Zinc									

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

QC Batch ID: MP26664
Matrix Type: AQUEOUS
Prep Date: 08/22/16
Login Number: MC47407
Account: ENVIRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Methods: SW846 6010C
Units: ug/l

Prep Date:		08/22/16		08/22/16	
Metal	RL	IDL	MDL	MR raw	MR final
Vanadium	10	.52	.4	0.0	<10
Zinc	20	.79	1	0.80	<20
Zirconium	50	.36	2.6		

Associated samples MP26664: MC47407-1F, MC47407-2F, MC47407-3F, MC47407-4F, MC47407-5F, MC47407-6F, MC47407-7F, MC47407-8F, MC47407-9F, MC47407-10F

Associated samples MP26664: MC47407-1F, MC47407-2F, MC47407-3F, MC47407-4F, MC47407-6F, MC47407-7F, MC47407-8F, MC47407-9F, MC47407-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

QC Batch ID: MP26664
Matrix Type: AQUEOUS
Prep Date: 08/22/16
QC Batch ID: MP26664
Matrix Type: AQUEOUS
Methods: SM816 6010C
Units: ug/l

Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Account: ENVTRAC - EnviroTrac
Login Number: MC47407

Metal	MC47407-1F Original S/L 1:5	10DIF	QC Limits
Aluminum	anr		
Antimony	0.00	0.00	NC 0-10
Arsenic	29.5	33.6	13.9 (a) 0-10
Barium	7.50	9.70	29.3 (a) 0-10
Beryllium	0.00	0.00	NC 0-10
Bismuth			
Boron			
Cadmium	0.00	0.00	NC 0-10
Calcium	anr		
Chromium	0.00	0.00	NC 0-10
Cobalt	anr		
Copper	anr		
Gold			
Iron	anr		
Lead	0.00	0.00	NC 0-10
Lithium			
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	1.40	0.00	100.0(a) 0-10
Palladium			
Platinum			
Potassium	anr		
Selenium	0.00	0.00	NC 0-10
Silicon			
Silver	0.00	0.00	NC 0-10
Sodium	anr		
Sulfur			
Strontium			
Thallium	0.00	0.00	NC 0-10
Tin			
Titanium			
Tungsten			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

QC Batch ID: MP26664
Matrix Type: AQUEOUS
Prep Date: 08/22/16
QC Batch ID: MP26664
Matrix Type: AQUEOUS
Methods: SM816 6010C
Units: ug/l

Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA
Account: ENVTRAC - EnviroTrac
Login Number: MC47407

Metal	BSP Result	Spikelet MPICP7	% Rec	QC Limits	BSD Result	Spikelet MPICP7	% Rec	BSD RPD	QC Limit
Vanadium	495	500	99.0	80-120	494	500	98.8	0.2	20
Zinc	523	500	104.6	80-120	529	500	105.8	1.1	20
Zirconium									

Associated samples MP26664: MC47407-1F, MC47407-2F, MC47407-3F, MC47407-4F, MC47407-6F, MC47407-7F, MC47407-8F, MC47407-9F, MC47407-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC47407
Account: ENVTRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

QC Batch ID: MP26670
Matrix Type: AQUEOUS
Methods: SW846 147CA
Units: ug/l

Prep Date: 08/23/16

Meta.	R:	IDL	MDL	WR		MR	
				Raw	Final	Raw	Final

Mercury 0.20 .038 .034 -0.038 <0.20 -0.046 <0.20

Associated samples ME26670: MC47407-1F, MC47407-2F, MC47407-3F, MC47407-4F, MC47407-6F, MC47407-7F, MC47407-8F, MC47407-9F, MC47407-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.2.1 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC47407
Account: ENVTRAC - EnviroTrac
Project: Maggiore Somerville, 343 - 351 Summer Street, Somerville, MA

QC Batch ID: MP26664
Matrix Type: AQUEOUS
Methods: SW846 6010C
Units: ug/l

Prep Date: 08/22/16

Metal	MC47407-1F		SDI	1:5	#DIF	QC	
	Original	SDI				Limits	

Vanadium 0.00 0.00 NC 0-10

Zinc 13.6 15.3 12.5 (a) 0-10

Zirconium

Associated samples MP26664: MC47407-1F, MC47407-2F, MC47407-3F, MC47407-4F, MC47407-6F, MC47407-7F, MC47407-8F, MC47407-9F, MC47407-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

9.1.3 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Project: Muggmore Somerville, 343 - 351 Summer Street, Somerville, MA
Login Number: MC4/407
Account: ENVIRAC - EnviroTeac

QC Batch ID: MP266/0
Matrix Type: AQUEOUS
Methods: SW846 747CA
Units: ug/l

08/23/16				08/23/16			
Prep Date:		08/23/16		08/23/16		08/23/16	
Metal	BSP Result	SpikeLot HGRWSI	% Rec	QC Limits	BSD Result	SpikeLot HGRWSI	% Rec
Mercury	2.5	3	83.3	80-120	3.0	3	100.0

QC Limit
BSP RPD
BSD RPD
QC Limit

Associated samples MP266/0: MC4/407-1F, MC4/407-2F, MC4/407-3F, MC4/407-4F, MC4/407-6F, MC4/407-7F, MC4/407-8F, MC4/407-9F, MC4/407-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anc) Analyte not requested

APPENDIX B
REMEDIATION WASTE DOCUMENTATION



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 112

Release Tracking Number

3 - 33735

BILL OF LADING (pursuant to 310 CMR 40.0030)

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: FORMER GASOLINE SERVICE STATION
2. Street Address: 343 SUMMER STREET
3. City/Town: SOMERVILLE 4. Zip Code: _____
- ☐ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category.
☐ a. Tier I ☐ b. Tier ID ☐ c. Tier II

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

- ☐ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility.
Response Actions associated with this BOL (check all that apply):
☐ a. Immediate Response Action (IRA) ☐ e. Comprehensive Response Actions
☐ b. Release Abatement Measure (RAM) ☐ f. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
☐ c. Downgradient Property Status (DPS) ☐ g. Other _____
☐ d. Utility Release Abatement Measure (URAM)
- ☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):
- ☒ 3. Submit an Attestation of **Completion of Shipment to a Receiving Facility** (Sections C, F and J are not required):
- ☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void**. (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: 9/20/2016 b. eDEP Transaction ID: 863720
(mm/dd/yyyy)
6. Period of Generation Associated with this Bill of Lading 8/8/2016 to 8/12/2016
(mm/dd/yyyy) (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted above)

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media/Debris (check all that apply):
☐ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris
☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other: _____
2. Uncontainerized Waste (check all that apply):
☐ a. Inorganic Absorbent Materials ☐ b. Other: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

3 - 33735

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):

- ☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments
☐ e. Other: _____

4. Estimated Quantity: _____ ☐ Tons ☐ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):

- ☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment
☐ d. Other: _____

6. Type of Contaminant (check all that apply):

- ☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel
☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☐ k. Other: _____

7. Constituents of Concern (check all that apply):

- ☐ a. As ☐ b. Cd ☐ c. Cr ☐ d. Pb ☐ e. Hg ☐ f. EPH/TPH ☐ g. VPH
☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other: _____

8. If applicable, check the box for the Reportable Concentration Category of the site:

- ☐ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2

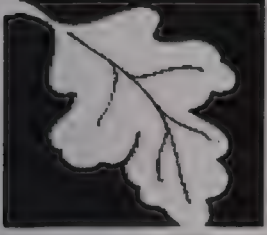
9. Remediation Waste Characterization Documentation (check at least one):

- ☐ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☐ c. Laboratory Data
☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department

i. Date submitted: _____ ii. Type of Documentation: _____
(mm/dd/yyyy)

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: STRATEGIC ENVIRONMENTAL SER.
2. Contact First Name: MICHAEL 3. Last Name: RUGGIERI
4. Street: 362 PUTNAM HILL ROAD 5. Title: PROJECT MANAGER
6. City/Town: SUTTON 7. State: MA 8. Zip Code: 015900000
9. Telephone: 5087577782 10. Ext: 11. Email: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

3 - 33735

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: AGGREGATE RECYCLING CORP.

2. Contact First Name: JOHN 3. Last Name: DOHERTY

4. Street: 434 DOW HIGHWAY 5. Title: CEO

6. City/Town: ELIOT 7. State: ME 8. Zip Code: 039030000

9. Telephone: 2074395584 10. Ext: 11. Email:

12. Type of facility: (check one)

a. Temporary Storage i. Period of Temporary Storage to
(mm/dd/yyyy) (mm/dd/yyyy)

ii. Reason for Temporary Storage:

☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover

☒ f. Asphalt Batch/Cold Mix ☐ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:

13. Division of Hazardous Waste/Class A Permit Number: NA

14. Division of Solid Waste Permit Number: S-021818-WK-B-N

15. EPA Identification Number: NA

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

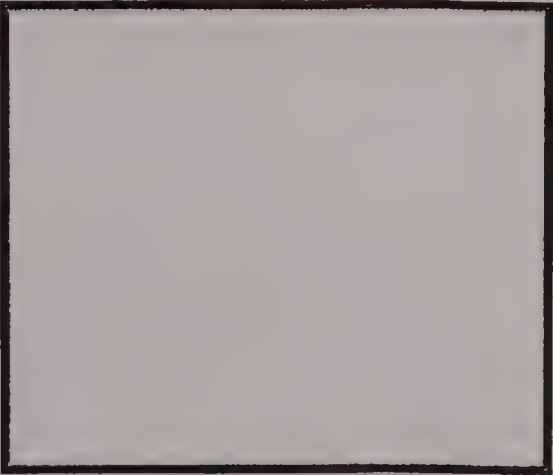
1. LSP #: 8972

2. First Name: ROBERT H 3. Last Name: BIRD

4. Telephone: 5082447111 5. Ext: 6. Email:

7. Signature:

8. Date:
(mm/dd/yyyy)

9. LSP Stamp: 



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 112

Release Tracking Number

3 - 33735

BILL OF LADING (pursuant to 310 CMR 40.0030)

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: THE DAKOTA PARTNERS LLC
3. Contact First Name: MARC 4. Last Name: DIAGLE
5. Street: 1264 MAIN STREET 6. Title: _____
7. City/Town: WALTHAM 8. State: MA 9. Zip Code: 024510000
10. Telephone: 6175946132 11. Ext: _____ 12. Email: _____

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING:

☐ Check here to change relationship

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
- ☒ e. Other RP or PRP Specify: NON-SPECIFIED PRP
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking Response Actions: Specify Relationship: _____

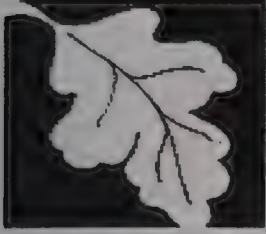
I. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.
- ☐ 2. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to BWSC.eDEP@state.ma.us
- ☐ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING:

1. I, _____, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ 3. Title: _____
4. For: THE DAKOTA PARTNERS LLC 5. Date: _____
- (Name of person or entity recorded in Section G) (mm/dd/yyyy)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC 112

Release Tracking Number

3 - 33735

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.):

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section G.

7. Street: _____

8. City/Town: _____

9. State: _____

10. Zip Code: _____

11. Telephone: _____

12. Ext: _____

13. Email: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on 9/27/2016 3:00:09 PM



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY OF SHIPMENT SHEET 1 OF 1

3 - 33735

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: <input type="checkbox"/> yds3 <input checked="" type="checkbox"/> tons <input type="checkbox"/> gals
9/23/2016	9/23/2016	1	4.77
5. Totals Recorded on this Summary of Shipment Sheet:		1	4.77



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 112B

Release Tracking Number

3 - 33735

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET SIGNATURE PAGE

A. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

1. I, JOHN J. DOHERTY, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: JOHN J. DOHERTY 3. Title: CEO
4. For: AGGREGATE RECYCLING CORP. 5. Date: 9/27/2016
(mm/dd/yyyy)

6. Date of Final Shipment associated with this Bill of lading: 9/23/2016
(mm/dd/yyyy)

B. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTIONS ASSOCIATED WITH THIS BILL OF LADING:

1. I, MARC DAIGLE, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: MARC DAIGLE 3. Title: _____
4. For: THE DAKOTA PARTNERS LLC 5. Date: 9/27/2016
(Name of person or entity recorded in Section G) (mm/dd/yyyy)

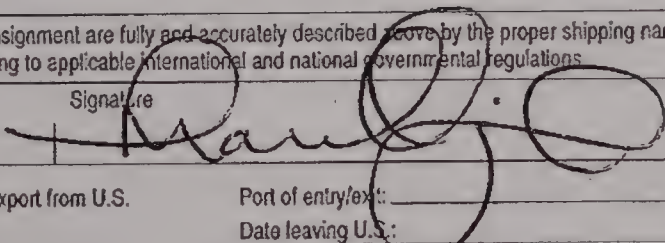
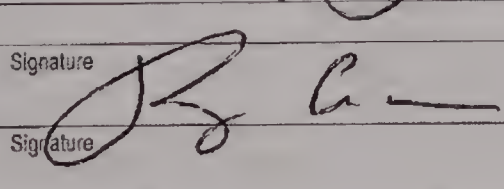
☐ 6. Check here if the address of the person providing certification is different from address recorded in BWSC112 Section G.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. Zip Code: _____

11. Telephone: _____ 12. Ext: _____ 13. Email: _____

☐ 14. Check here if attaching optional supporting documentation such as copies of Load Information Summary Sheets

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone	4. Waste Tracking Number 4805711
5. Generator's Name and Mailing Address The Dakota Partners LLC 1264 Main Street Waltham MA 02451 Generator's Phone: 617-584-6032		Generator's Site Address (if different than mailing address) Att: Marc Daigle The Dakota Partners LLC 343 Summer Street Somerville MA			
6. Transporter 1 Company Name Oil Recovery Corporation		U.S. EPA ID Number MA000006204003			
7. Transporter 2 Company Name		U.S. EPA ID Number			
8. Designated Facility Name and Site Address VEXOR Technology Inc. 955 West Smith Road Medina OH 44256 Facility's Phone: 330-721-9773		U.S. EPA ID Number OH00077772005			
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.
		No.	Type		
1. Non-DOT/Non RCRA Regulated VEX Oily Solids		002	Drum	700	P
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information 1)VEX#31551 Oily solids					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offeror's Printed/Typed Name MARC DAIGLE		Signature 		Month 9	Day 20
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:		Year 16	
16. Transporter Acknowledgment of Receipt of Materials		Signature 		Month 09	Day 20
Transporter 1 Printed/Typed Name Ray Crane		Signature		Year 16	
Transporter 2 Printed/Typed Name		Signature		Month	Day
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number:					
17b. Alternate Facility (or Generator)		U.S. EPA ID Number			
Facility's Phone:					
17c. Signature of Alternate Facility (or Generator)		Month Day Year			
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name		Signature		Month	Day
				Year	



The Commonwealth of Massachusetts
Department of Fire Services – Office of the State Fire Marshal



**RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK
FORMERLY CONTAINING MOTOR FUEL**

NAME AND ADDRESS OF APPROVED TANK YARD: JAMES G GRANT CO
R. 28 WOLCOTT ST
READVILLE, MA 02137

Approved tank yard no. 008 Tank Yard Ledger 502 CMR 3.03(3) Number: 2016-56896-A

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by (firm, corporation or partnership) Strategic Env. and accepted same in conformance with Office of the State Fire Marshal Regulations 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank Dismantling Yards. A valid permit was issued by the head of the **LOCAL** fire department FDID# 17274 to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

Signature: Bryan Nunes Title: Mgr. Date signed: 8-12-16

TANK DATA:	TANK REMOVED FROM:
Gallons: <u>60</u>	No. and Street: <u>343 Summer St.</u>
Previous contents: <u>#2</u>	City and Town: <u>Somerville</u>
Diameter: <u>-</u>	Fire Dept. Permit #: _____
Length: <u>-</u>	Notes: _____
Date Received: <u>8-12-16</u>	_____
Serial # (if available): _____	_____
Tank I.D. # (Form FP-290): _____	_____

EACH TANK MUST HAVE A RECEIPT OF DISPOSAL

Owner/Operator to mail revised copy of Notification Form (FP290, or FP290R) to:

Department of Environmental Protection
Bureau of Waste Prevention - UST Program
P.O. Box 120-0165
Boston, MA 02112-0165

This signed receipt of disposal must be returned to the head of the local fire department.



The Commonwealth of Massachusetts
Department of Fire Services – Office of the State Fire Marshal



**RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK
FORMERLY CONTAINING MOTOR FUEL**

NAME AND ADDRESS OF APPROVED TANK YARD:

JAMES G GRANT CO

R.28 WOLCOTT ST

READVILLE, MA 02137

Approved tank yard no. 008

Tank Yard Ledger 502 CMR 3.03(3) Number: 2016-56896-B

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by (firm, corporation or partnership) Strategic ENU and accepted same in conformance with Office of the State Fire Marshal Regulations 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank Dismantling Yards. A valid permit was issued by the head of the **LOCAL** fire department FDID# 17274 to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

Signature: Bryan Kuns Title: Manager Date signed: 8-12-16

TANK DATA:

Gallons: 60

Previous contents: #2

Diameter: -

Length: -

Date Received: 8-12-16

Serial # (if available): -

Tank I.D. # (Form FP-290): -

TANK REMOVED FROM:

No. and Street: 343 Summer St.

City and Town: Somerville

Fire Dept. Permit #: -

Notes: -

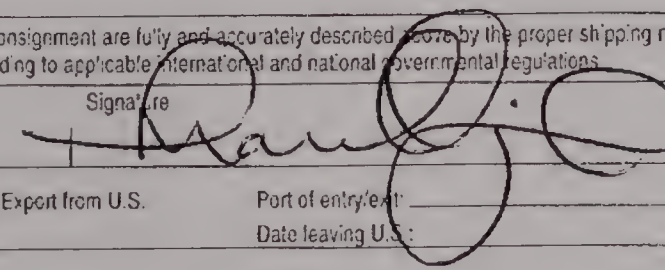
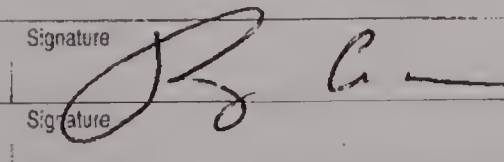
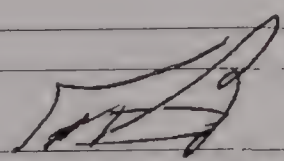
EACH TANK MUST HAVE A RECEIPT OF DISPOSAL

Owner/Operator to mail revised copy of Notification Form (FP290, or FP290R) to:

Department of Environmental Protection
Bureau of Waste Prevention - UST Program
P.O. Box 120-0165
Boston, MA 02112-0165

This signed receipt of disposal must be returned to the head of the local fire department.

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone	4. Waste Tracking Number
5. Generator's Name and Mailing Address The Dakota Partners LLC 1284 Main Street Waltham MA 02451 Generator's Phone: 517-594-6032		Generator's Site Address (if different than mailing address) The Dakota Partners LLC 343 Summer Street Somerville MA		U.S. EPA ID Number MA A 0 9 8 5 2 9 4 6 0 3	
6. Designated Facility Name and Site Address VEXOR Technology Inc 955 West Smith Road Medina OH 44258 Facility's Phone: 330-721-9773		U.S. EPA ID Number		U.S. EPA ID Number	
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit
1. Non-DOT/Non RCRA Regulated VEX Oily Solids		No.	Type		
1441746-1441747		002	Drum	700	P
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information 1) VEX # 31551 Oily solids					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offeror's Printed/Typed Name MARC DAIGLE		Signature 		Month Day Year 9 20 16	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
16. Transporter Acknowledgment of Receipt of Materials		Signature 		Month Day Year 09 20 16	
Transporter 1 Printed/Typed Name Ray Crane		Signature		Month Day Year	
Transporter 2 Printed/Typed Name		Signature		Month Day Year	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number:					
17b. Alternate Facility (for Generator)					
U.S. EPA ID Number					
Facility's Phone:					
17c. Signature of Alternate Facility (or Generator)					
Month Day Year					
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Jim Brown		Signature 		Month Day Year 10 05 16	

APPENDIX C
PUBLIC NOTIFICATION



March 15, 2017

Mayor Joseph A. Curtatone
City of Somerville
93 Highland Avenue
Somerville, Massachusetts 02143

Subject: Massachusetts Contingency Plan Release Notification
343 Summer Street
Somerville, Massachusetts
MassDEP RTN 3-33735

Dear Mayor Curtatone:

In accordance with the Massachusetts Contingency Plan (MCP), as set forth at 310 CMR 40.1403(3)(h), notification is hereby made that a Release Notification Form has been submitted to the Massachusetts Department of Environmental Protection (MassDEP) for the subject property.

A copy of the Release Notification Form is attached. Local officials may request additional Public Involvement Activities under 310 CMR 40.1403(9) and upon Tier Classification under 310 CMR 40.1404.

Please contact the undersigned with any questions at (781) 793-0074.

Sincerely,
EnviroTrac Ltd.

A handwritten signature in blue ink, appearing to read "Robert H. Bird".

Robert H. Bird, LSP
Principal Hydrogeologist

Attachment: BWSC103

Copy: MassDEP NERO



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 103

RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM

Release Tracking Number

3 - 33735

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: FORMER GASOLINE SERVICE STATION

2. Street Address: 343 SUMMER STREET

3. City/Town: SOMERVILLE 4. ZIP Code:

5. Coordinates: a. Latitude: N 42.39369 b. Longitude: W 71.11910

B. THIS FORM IS BEING USED TO: (check one)

- ☒ 1. Submit a Release Notification
- ☐ 2. Submit a Revised Release Notification
- ☐ 3. Submit a Retraction of a Previously Reported Notification of a release or threat of release including supporting documentation required pursuant to 310 CMR 40.0335 (Section C is not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR):

1. Date and time of Oral Notification, if applicable: 8/8/2016 Time: 10:03 ☒ AM ☐ PM
mm/dd/yyyy hh:mm

2. Date and time you obtained knowledge of the Release or TOR: 2/7/2017 Time: 11:00 ☒ AM ☐ PM
mm/dd/yyyy hh:mm

3. Date and time release or TOR occurred, if known: 8/8/2016 Time: 09:25 ☒ AM ☐ PM
mm/dd/yyyy hh:mm

Check all Notification Thresholds that apply to the Release or Threat of Release:
(for more information see 310 CMR 40.0310 - 40.0315)

- | | | |
|---|--|---|
| 4. 2 HOUR REPORTING CONDITIONS | 5. 72 HOUR REPORTING CONDITIONS | 6. 120 DAY REPORTING CONDITIONS |
| <input checked="" type="checkbox"/> a. Sudden Release | <input checked="" type="checkbox"/> a. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch (.04 feet) | <input checked="" type="checkbox"/> a. Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s) |
| <input type="checkbox"/> b. Threat of Sudden Release | <input checked="" type="checkbox"/> b. Underground Storage Tank (UST) Release | <input checked="" type="checkbox"/> b. Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards |
| <input type="checkbox"/> c. Oil Sheen on Surface Water | <input type="checkbox"/> c. Threat of UST Release | <input type="checkbox"/> c. Release of Oil to Groundwater Exceeding Reportable Concentration(s) |
| <input type="checkbox"/> d. Poses Imminent Hazard | <input type="checkbox"/> d. Release to Groundwater near Water Supply | <input type="checkbox"/> d. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch (.01 feet) and Less than 1/2 Inch (.04 feet) |
| <input type="checkbox"/> e. Could Pose Imminent Hazard | <input type="checkbox"/> e. Substantial Release Migration | |
| <input type="checkbox"/> f. Release Detected in Private Well | | |
| <input type="checkbox"/> g. Release to Storm Drain | | |
| <input type="checkbox"/> h. Sanitary Sewer Release (Imminent Hazard Only) | | |



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

BWSC 103

Release Tracking Number

3 - 33735

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR): (cont.)

7. List below the Oils (O) or Hazardous Materials (HM) that exceed their Reportable Concentration (RC) or Reportable Quantity (RQ) by the greatest amount.

☐ Check here if an amount or concentration is unknown or less than detectable.

O or HM Released	CAS Number, if known	O or HM	Amount or Concentration	Units	RCs Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
FUEL OIL		O	35	GAL	N/A
EPH C9-C18 ALIPHATIC FRACTION		O	1390	MG/KG	RCS-1
EPH C19-C36 ALIPHATIC FRACTION		O	5850	MG/KG	RCS-1
EPH C11-C22 AROMATIC FRACTION		O	2350	MG/KG	RCS-1

☒ Check here if a list of additional Oil and Hazardous Materials subject to reporting, or any other documentation relating to this notification is attached.

D. PERSON REQUIRED TO NOTIFY:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☒ c. change in the person notifying

2. Name of Organization: 351 SUMMER LLC

3. Contact First Name: MATTHEW 4. Last Name: MAGGIORE

5. Street: 13 WHEELING AVENUE 6. Title: MANAGER

7. City/Town: WOBURN 8. State: MA 9. ZIP Code: 018010000

10. Telephone: 781-935-6100 11. Ext.: 12. Email: matt@maggiorecos.com

☐ 13. Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).

E. RELATIONSHIP OF PERSON TO RELEASE OR THREAT OF RELEASE: ☐ Check here to change relationship

☒ 1. RP or PRP ☒ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify: _____

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Otherwise Required to Notify Specify Relationship: _____



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

BWSC 103

Release Tracking Number

3 - 33735

F. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

1. I, MATTHEW MAGGIORE, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

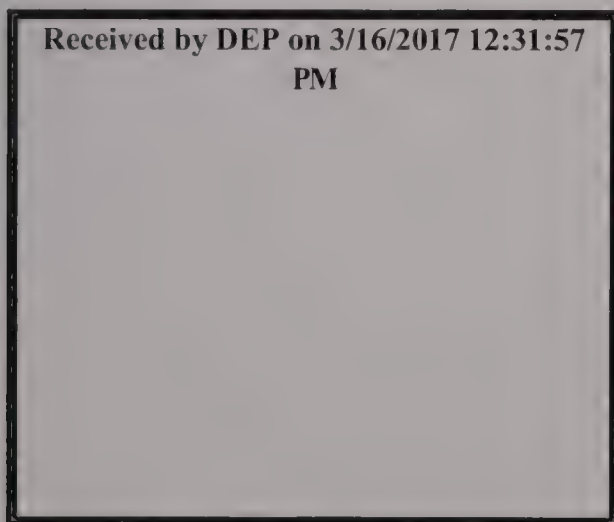
2. By : MATTHEW MAGGIORE 3. Title: MANAGER
Signature
4. For: 351 SUMMER LLC 5. Date : 3/16/2017
(Name of person or entity recorded in Section D) mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____
8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____
11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO ANNUAL COMPLIANCE ASSURANCE FEES FOR EACH BILLABLE YEAR FOR TIER CLASSIFIED DISPOSAL SITES. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)



ADDITIONAL OHM SUBJECT TO REPORTING

**ATTACHMENT TO BWSC103
RELEASE NOTIFICATION & NOTIFICATION RETRACTION FORM
RTN 3-33735**

Former Gasoline Service Station
343 Summer Street
Somerville, Massachusetts

O or HM Released	CAS Number, if known	O or HM	Amount or Concentration	Units	RCs Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
Acenaphthylene		O	2.5	mg/kg	RCS-1
Benzo(a)anthracene		O	28.1	mg/kg	RCS-1
Benzo(a)pyrene		O	19.2	mg/kg	RCS-1
Benzo(b)fluoranthene		O	28.2	mg/kg	RCS-1
Dibenzo(a,h)anthracene		O	3.8	mg/kg	RCS-1
Indeno(1,2,3-cd)pyrene		O	11.4	mg/kg	RCS-1
Phenanthrene		O	44.5	mg/kg	RCS-1
2-Methylnaphthalene		O	41.1	mg/kg	RCS-1
Naphthalene		O	24.1	mg/kg	RCS-1
VPH C5-C5 Aliphatic Fraction		O	118	mg/kg	RCS-1
VPH C9-C10 Aromatic Fraction		O	566	mg/kg	RCS-1
Lead		HM	350	mg/kg	RCS-1



March 15, 2017

Board of Health
City of Somerville
50 Evergreen Avenue
Somerville, Massachusetts 02145

Subject: Massachusetts Contingency Plan Release Notification
343 Summer Street
Somerville, Massachusetts
MassDEP RTN 3-33735

To Whom it May Concern:

In accordance with the Massachusetts Contingency Plan (MCP), as set forth at 310 CMR 40.1403(3)(h), notification is hereby made that a Release Notification Form has been submitted to the Massachusetts Department of Environmental Protection (MassDEP) for the subject property.

A copy of the Release Notification Form is attached. Local officials may request additional Public Involvement Activities under 310 CMR 40.1403(9) and upon Tier Classification under 310 CMR 40.1404.

Please contact the undersigned with any questions at (781) 793-0074.

Sincerely,
EnviroTrac Ltd.

A handwritten signature in blue ink, appearing to read "Robert H. Bird".

Robert H. Bird, LSP
Principal Hydrogeologist

Attachment: BWSC103

Copy: MassDEP NERO



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 103

**RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM**

Release Tracking Number

3 - 33735

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: FORMER GASOLINE SERVICE STATION

2. Street Address: 343 SUMMER STREET

3. City/Town: SOMERVILLE 4. ZIP Code: _____

5. Coordinates: a. Latitude: N 42.39369 b. Longitude: W 71.11910

B. THIS FORM IS BEING USED TO: (check one)

- ☒ 1. Submit a **Release Notification**
- ☐ 2. Submit a **Revised Release Notification**
- ☐ 3. Submit a **Retraction of a Previously Reported Notification** of a release or threat of release including supporting documentation required pursuant to 310 CMR 40.0335 (Section C is not required)

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Check all Notification Thresholds that apply to the Release or Threat of Release:
(for more information see 310 CMR 40.0310 - 40.0315)

4. 2 HOUR REPORTING CONDITIONS

5. 72 HOUR REPORTING CONDITIONS

6. 120 DAY REPORTING CONDITIONS

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> a. Sudden Release | <input checked="" type="checkbox"/> a. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch (.04 feet) | <input checked="" type="checkbox"/> a. Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s) |
| <input type="checkbox"/> b. Threat of Sudden Release | <input checked="" type="checkbox"/> b. Underground Storage Tank (UST) Release | <input checked="" type="checkbox"/> b. Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards |
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| <input type="checkbox"/> d. Poses Imminent Hazard | <input type="checkbox"/> d. Release to Groundwater near Water Supply | <input type="checkbox"/> d. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch (.01 feet) and Less than 1/2 Inch (.04 feet) |
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| <input type="checkbox"/> f. Release Detected in Private Well | | |
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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

BWSC 103

Release Tracking Number

3 - 33735

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EPH C9-C18 ALIPHATIC FRACTION		O	1390	MG/KG	RCS-1
EPH C19-C36 ALIPHATIC FRACTION		O	5850	MG/KG	RCS-1
EPH C11-C22 AROMATIC FRACTION		O	2350	MG/KG	RCS-1

☒ Check here if a list of additional Oil and Hazardous Materials subject to reporting, or any other documentation relating to this notification is attached.

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1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☒ c. change in the person notifying

2. Name of Organization: 351 SUMMER LLC

3. Contact First Name: MATTHEW

4. Last Name: MAGGIORE

5. Street: 13 WHEELING AVENUE

6. Title: MANAGER

7. City/Town: WOBURN

8. State: MA

9. ZIP Code: 018010000

10. Telephone: 781-935-6100

11. Ext:

12. Email: matt@maggiorecos.com

☐ 13. Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).

E. RELATIONSHIP OF PERSON TO RELEASE OR THREAT OF RELEASE: ☐ Check here to change relationship

☒ 1. RP or PRP ☒ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP

Specify:

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

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Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**RELEASE NOTIFICATION & NOTIFICATION
RETRACTION FORM**

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

BWSC 103

Release Tracking Number

3 - 33735

F. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

1. I, MATTHEW MAGGIORE, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

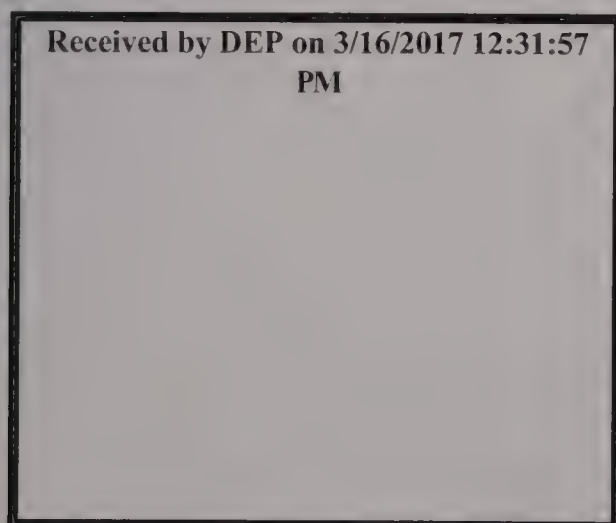
2. By : MATTHEW MAGGIORE 3. Title: MANAGER
Signature
4. For: 351 SUMMER LLC 5. Date : 3/16/2017
(Name of person or entity recorded in Section D) mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____
8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____
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YOU ARE SUBJECT TO ANNUAL COMPLIANCE ASSURANCE FEES FOR EACH BILLABLE YEAR FOR TIER CLASSIFIED DISPOSAL SITES. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)



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343 Summer Street
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Benzo(a)anthracene		O	28.1	mg/kg	RCS-1
Benzo(a)pyrene		O	19.2	mg/kg	RCS-1
Benzo(b)fluoranthene		O	28.2	mg/kg	RCS-1
Dibenzo(a,h)anthracene		O	3.8	mg/kg	RCS-1
Indeno(1,2,3-cd)pyrene		O	11.4	mg/kg	RCS-1
Phenanthrene		O	44.5	mg/kg	RCS-1
2-Methylnaphthalene		O	41.1	mg/kg	RCS-1
Naphthalene		O	24.1	mg/kg	RCS-1
VPH C5-C5 Aliphatic Fraction		O	118	mg/kg	RCS-1
VPH C9-C10 Aromatic Fraction		O	566	mg/kg	RCS-1
Lead		HM	350	mg/kg	RCS-1

